APPLICATIONS:

APPEAL APPLICATION

Instructions and Checklist

Related Code Section: Refer to the City Planning case determination to identify the Zone Code section for the entitlement and the appeal procedure.

Purpose: This application is for the appeal of Department of City Planning determinations authorized by the Los Angeles Municipal Code (LAMC).

A. APPELLATE BODY/CASE INFORMATION

1. APPELLATE BODY

☐ Area Planning Commission ☐ City Planning Commission ☑ City Council ☐ Director of Planning
☐ Zoning Administrator

Regarding Case Number: CPC-2022-5865-CU-SPR; ENV-2022-5866-MND

Project Address: 15526 and 15544 West Plummer Street

Final Date to Appeal: 03/17/2023

2. APPELLANT

Appellant Identity: (check all that apply)
☑ Representative ☐ Property Owner
☐ Applicant ☐ Operator of the Use/Site

☑ Person, other than the Applicant, Owner or Operator claiming to be aggrieved
Coalition for Responsible Equitable Economic Development Los Angeles (CREED LA)

☐ Person affected by the determination made by the **Department of Building and Safety**

☐ Representative ☐ Owner ☐ Aggrieved Party
☐ Applicant ☐ Operator

3. APPELLANT INFORMATION

Appellant's Name: CREED LA c/o Kevin Carmichael

Company/Organization: Adams Broadwell Joseph & Cardozo

Mailing Address: 520 Capitol Mall, Suite 350

City: Sacramento State: CA Zip: 95814

Telephone: (916) 444-6201 E-mail: kcarmichael@adamsbroadwell.com

a. Is the appeal being filed on your behalf or on behalf of another party, organization or company?

☐ Self ☑ Other: CREED LA

b. Is the appeal being filed to support the original applicant's position? ☐ Yes ☑ No

4. REPRESENTATIVE/AGENT INFORMATION

Representative/Agent name (if applicable): Kevin Carmichael

Company: Adams Broadwell Joseph & Cardozo

Mailing Address: 520 Capitol Mall, Suite 350

City: Sacramento State: CA Zip: 95814

Telephone: (916) 444-6201 E-mail: kcarmichael@adamsbroadwell.com

5. JUSTIFICATION/REASON FOR APPEAL

a. Is the entire decision, or only parts of it being appealed? ☑ Entire ☐ Part

b. Are specific conditions of approval being appealed? ☑ Yes ☐ No

If Yes, list the condition number(s) here: All conditions approved by the City Planning Commission

Attach a separate sheet providing your reasons for the appeal. Your reason must state:

- ☑ The reason for the appeal
- ☑ How you are aggrieved by the decision
- ☑ Specifically the points at issue
- ☑ Why you believe the decision-maker erred or abused their discretion

6. APPLICANT'S AFFIDAVIT

I certify that the statements contained in this application are complete and true:

Appellant Signature: _____ Date: _____

GENERAL APPEAL FILING REQUIREMENTS

B. ***ALL CASES REQUIRE THE FOLLOWING ITEMS - SEE THE ADDITIONAL INSTRUCTIONS FOR SPECIFIC CASE TYPES***

1. Appeal Documents

a. Three (3) sets - The following documents are required for each appeal filed (1 original and 2 duplicates) Each case being appealed is required to provide three (3) sets of the listed documents.

- ☐ Appeal Application (form CP-7769)
- ☐ Justification/Reason for Appeal
- ☐ Copies of Original Determination Letter

b. Electronic Copy

☑ Provide an electronic copy of your appeal documents on a flash drive (planning staff will upload materials during filing and return the flash drive to you) or a CD (which will remain in the file). The following items must be saved as individual PDFs and labeled accordingly (e.g. "Appeal Form.pdf", "Justification/Reason Statement.pdf", or "Original Determination Letter.pdf" etc.). No file should exceed 9.8 MB in size.

c. Appeal Fee

- ☐ Original Applicant - A fee equal to 85% of the original application fee, provide a copy of the original application receipt(s) to calculate the fee per LAMC Section 19.01B 1.
- ☑ Aggrieved Party - The fee charged shall be in accordance with the LAMC Section 19.01B 1.

d. Notice Requirement

- ☐ Mailing List - All appeals require noticing per the applicable LAMC section(s). Original Applicants must provide noticing per the LAMC
- ☐ Mailing Fee - The appeal notice mailing fee is paid by the project applicant, payment is made to the City Planning's mailing contractor (BTC), a copy of the receipt must be submitted as proof of payment.

SPECIFIC CASE TYPES - APPEAL FILING INFORMATION

C. DENSITY BONUS / TRANSIT ORIENTED COMMUNITES (TOC)

1. Density Bonus/TOC
Appeal procedures for Density Bonus/TOC per LAMC Section 12.22.A 25 (g) f.

NOTE:
- Density Bonus/TOC cases, only the *on menu or additional incentives* items can be appealed.

- Appeals of Density Bonus/TOC cases can only be filed by adjacent owners or tenants (must have documentation), and always only appealable to the Citywide Planning Commission.

☐ Provide documentation to confirm adjacent owner or tenant status, i.e., a lease agreement, rent receipt, utility bill, property tax bill, ZIMAS, drivers license, bill statement etc.

D. WAIVER OF DEDICATION AND OR IMPROVEMENT

Appeal procedure for Waiver of Dedication or Improvement per LAMC Section 12.37 I.

NOTE:
- Waivers for By-Right Projects, can only be appealed by the owner.

- When a Waiver is on appeal and is part of a master land use application request or subdivider's statement for a project, the applicant may appeal pursuant to the procedures that governs the entitlement.

E. TENTATIVE TRACT/VESTING

1. Tentative Tract/Vesting - Appeal procedure for Tentative Tract / Vesting application per LAMC Section 17.54 A.

NOTE: Appeals to the City Council from a determination on a Tentative Tract (TT or VTT) by the Area or City Planning Commission must be filed within 10 days of the date of the written determination of said Commission.

☐ Provide a copy of the written determination letter from Commission.

F. BUILDING AND SAFETY DETERMINATION

☐ **1.** Appeal of the *Department of Building and Safety* determination, per LAMC 12.26 K 1, an appellant is considered the **Original Applicant** and must provide noticing and pay mailing fees.

a. Appeal Fee
☐ Original Applicant - The fee charged shall be in accordance with LAMC Section 19.01B 2, as stated in the Building and Safety determination letter, plus all surcharges. (the fee specified in Table 4-A, Section 98.0403.2 of the City of Los Angeles Building Code)

b. Notice Requirement
☐ Mailing Fee - The applicant must pay mailing fees to City Planning's mailing contractor (BTC) and submit a copy of receipt as proof of payment.

☐ **2.** Appeal of the *Director of City Planning* determination per LAMC Section 12.26 K 6, an applicant or any other aggrieved person may file an appeal, and is appealable to the Area Planning Commission or Citywide Planning Commission as noted in the determination.

a. Appeal Fee
☐ Original Applicant - The fee charged shall be in accordance with the LAMC Section 19.01 B 1 a.

b. Notice Requirement
☐ Mailing List - The appeal notification requirements per LAMC Section 12.26 K 7 apply.
☐ Mailing Fees - The appeal notice mailing fee is made to City Planning's mailing contractor (BTC), a copy of receipt must be submitted as proof of payment.

G. NUISANCE ABATEMENT

1. Nuisance Abatement - Appeal procedure for Nuisance Abatement per LAMC Section 12.27.1 C 4

NOTE:
- Nuisance Abatement is only appealable to the City Council.

a. Appeal Fee

☐ Aggrieved Party the fee charged shall be in accordance with the LAMC Section 19.01 B 1.

2. Plan Approval/Compliance Review

Appeal procedure for Nuisance Abatement Plan Approval/Compliance Review per LAMC Section 12.27.1 C 4.

a. Appeal Fee

☐ Compliance Review - The fee charged shall be in accordance with the LAMC Section 19.01 B.

☐ Modification - The fee shall be in accordance with the LAMC Section 19.01 B.

NOTES

A Certified Neighborhood Council (CNC) or a person identified as a member of a CNC or as representing the CNC may not file an appeal on behalf of the Neighborhood Council; persons affiliated with a CNC may only file as an individual on behalf of self.

***Please note** that the appellate body must act on your appeal within a time period specified in the Section(s) of the Los Angeles Municipal Code (LAMC) pertaining to the type of appeal being filed. The Department of City Planning will make its best efforts to have appeals scheduled prior to the appellate body's last day to act in order to provide due process to the appellant. If the appellate body is unable to come to a consensus or is unable to hear and consider the appeal prior to the last day to act, the appeal is automatically deemed denied, and the original decision will stand. The last day to act as defined in the LAMC may only be extended if formally agreed upon by the applicant.*

This Section for City Planning Staff Use Only		
Base Fee:	Reviewed & Accepted by (DSC Planner):	Date:
Receipt No:	Deemed Complete by (Project Planner):	Date:
☐ Determination authority notified	☐ Original receipt and BTC receipt (if original applicant)	

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March 16, 2023

Via Email and Electronic Submission through Online Portal

City Council
City of Los Angeles
C/o Appeals Clerk
200 N Spring St, Room 360
Los Angeles, CA 90012
Email: clerk.cps@lacity.org

Esther Ahn, City Planner
Email: esther.ahn@lacity.org

Via Online Portal:
https://plncts.lacity.org/oas

Re: Appeal to the Los Angeles City Council of the March 2, 2023, City Planning Commission Determination in the Valor Elementary School Project CPC-2022-5865-CU-SPR; ENV-2022-5866-MND

Dear Honorable Mayor Bass, City Council Members and Ms. Ahn:

On behalf of Coalition for Responsible Equitable Economic Development ("CREED LA") we are writing to appeal the City Planning Commission's March 2, 2023 determination approving the Conditional Use Permit ("CUP") and Site Plan Review ("SPR") for the Valor Elementary School Project, CPC-2022-5865-CU-SPR; ENV-2022-5866-MND ("Project"), including the City Planning Commission's adoption of the Project's Mitigated Negative Declaration ("MND"), and adopting Conditions of Approval.[1]

[1] City of Los Angeles, Letter of Determination, 15526 and 15544 West Plummer Street, Case No. CPC-2022-5865-CU-SPR (March 2, 2023) available at https://planning.lacity.org/pdiscaseinfo/document/MjI1MQ0/fe3b456d-e5a5-4f0e-9fa7-879f1ff43502/pdd

The Project proposes to construct a one and two-story, 26.5-foot-tall, elementary school building with 28 classrooms, totaling 23,538 square-feet. for grades transitional kindergarten ("TK") through 4; a 3,182 square-foot multi-purpose room, administrative spaces, corridors, storage spaces, and covered outdoor dining, and a surface parking lot with an ingress/egress driveway off Plummer Street.[2] The elementary school building would have a total building area of 34,755 sf and would accommodate a maximum enrollment of 552 students. The Project would also include 30,726 sf of open space and landscaping, including two play areas totaling 13,060 square-feet.

The Project site located at 15526-15544 Plummer Street, Los Angeles, CA 91343, on Assessor Parcel Numbers ("APN") 265-601-5007 and 265-601-5008, which are approximately 1.30 acres in size, and 0.76 acre in size respectively. The 1.30-acre parcel is currently undeveloped and covered with grasses, shrubs, and various mature trees, and the 0.76-acre parcel is currently developed with a one-story single-family residence with similar vegetation as the larger parcel. The site contains 56 trees/shrubs (including nine protected native trees/shrubs and 32 non-protected significant trees), and two street trees.

Pursuant to the City of Los Angeles ("City") appeal procedures, we have provided an electronic copy of this Justification for Appeal letter, the Appeal Application (Form CP-7769), and the original Determination Letter. We have also paid the required appeal fee of $158 via the Department of City Planning Online Application Portal.

The reasons for this appeal include that the City Planning Commission abused its discretion and violated the California Environmental Quality Act ("CEQA") when it approved the Project's CUP and SPR for the Project, and in adopting the MND, Findings, and Modified Conditions of Approval in violation of CEQA and land use laws. CEQA requires that the potential impacts of this Project be evaluated in an environmental impact report ("EIR"), not in an MND, because substantial evidence exists that the Project may have significant, unmitigated environmental impacts to public health, noise, and public safety that are not adequately disclosed or mitigated by the MND.

[2] MND, p .1.

Our December 14, 2022, and February 21, 2023, comment letters on the Project are attached hereto and incorporated by reference.[3] The specific reasons for this appeal are set forth in detail in those letters and summarized below. In short, substantial evidence supports a fair argument that that Project will cause: (1) a significant, unmitigated cancer risk from air pollution emissions to future students and staff, (2) a significant, unmitigated impact from noise, and (3) a potentially significant, unmitigated impact to public safety. Additionally, the City failed to consult with the Department of Toxic Substances Control and prepare a preliminary endangerment assessment in violation of California law.

I. STATEMENT OF INTEREST

CREED LA is an unincorporated association of individuals and labor organizations formed to ensure that the construction of major urban projects in the Los Angeles region proceed in a manner that minimizes public and worker health and safety risks, avoids, or mitigates environmental and public service impacts, and fosters long-term sustainable construction and development opportunities. The association includes the Sheet Metal Workers Local 105, International Brotherhood of Electrical Workers Local 11, Southern California Pipe Trades District Council 16, and District Council of Iron Workers of the State of California, along with their members, their families, and other individuals who live and work in the Los Angeles region.

Individual members of CREED LA live in the City of Los Angeles, and work, recreate, and raise their families in the City and surrounding communities. Accordingly, they would be directly affected by the Project's environmental and health, and safety impacts. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards that exist on site.

CREED LA has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and

[3] *See* **Exhibit 1:** Letter from Kevin Carmichael to Esther Ahn re Comments on the Mitigated Negative Declaration for the Valor Elementary School Project (ENV-2022-5866-MND) (December 14, 2022); and **Exhibit 2:** Letter from Kevin Carmichael to Los Angeles City Planning Commission re: Agenda Item 7: Valor Elementary School Project, Case No. CPC-2022-5865-CU-SPR, CEQA No. ENV-2022-5866-MND (February 21, 2023).

by making the area less desirable for new businesses and new residents. Continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

CREED LA supports the development of commercial, mixed use, and educational projects where properly analyzed and carefully planned to minimize impacts on public health, climate change, and the environment. These projects should avoid adverse impacts to air quality, public health, climate change, noise, and traffic, and must incorporate all feasible mitigation to ensure that any remaining adverse impacts are reduced to the maximum extent feasible. Only by maintaining the highest standards can commercial development truly be sustainable.

II. REASONS FOR APPEAL

A. There is Substantial Evidence Demonstrating that the Project May Cause a Significant, Unmitigated Cancer Risk from Exposure to Air Pollution

The MND concludes that the health risk posed to future students and staff at the Project site from exposure to high air pollution concentrations, including diesel particulate matter ("DPM") emissions, would be less than significant. We previously explained that the MND's conclusion is unsupported and that the City failed to analyze the background risk from air pollution in the Project area.

Substantial evidence supports a fair argument that development of the Project will place children and staff in an area of high air pollution concentrations. CREED LA's expert, Dr. James Clark, found that the cumulative cancer risk from air pollutants in the area of the Project is 413 in 1,000,000. DPM accounts for approximately 65 percent of that risk, or 268 in 1,000,000, while the 145 in 1,000,000 comes from benzene, formaldehyde and other gasses which will not be treated with the MERV filters proposed as mitigation for the Project. Assuming that the MERV 13 filters at the site would reduce the cancer risk from DPM by 90 percent, the cumulative risk to students and staff will still exceed the SCAQMD threshold of 100 in 1,000,000, resulting in a significant impact.

The City must prepare an EIR that includes disclosure and analysis of the potentially significant health risk impacts to future students and staff at the Project site and require additional mitigation to reduce the Project's health risks from air pollution.

B. The City Failed to Perform a Preliminary Endangerment Assessment

CREED LA previously presented substantial evidence supporting a fair argument that the City is required to consult with the Department of Toxic Substances Control ("DTSC") and prepare a Preliminary Endangerment Assessment for the Project. The Applicant failed to comply with this requirement, and the City Planning Commission failed to require the Applicant to provide evidence demonstrating compliance. As a result, the Project fails to comply with both the Education Code and CEQA because the Project may result in significant, unmitigated health risk to students and teachers.[4]

As a condition of receiving state funding for school construction projects pursuant to California Education Code Chapter 12.5 section 17078.52, a charter school must complete the three-step process outlined in Education Code § 17213.1 and assess whether there has been a release of hazardous waste at a school site.[5] As explained in our prior comments, the process requires consultation with DTSC and to enter into an Environmental Oversight Agreement with DTSC, then contract with a qualified environmental consultant to prepare an assessment according to DTSC guidelines.[6]

The Applicant asserts that consultation with DTSC is not required because no Charter Schools Facilities Program ("CSFP") funds would be used for the construction of the Project[7], despite the fact that the Applicant's 2022-2023 operational budget includes a line item for Proposition 1D grants to fund school construction projects, noting that $26,971,711 in assets are restricted for construction.[8] The Applicant must provide a guarantee that no State funds will be used for Project construction, otherwise, the City must conduct the necessary consultation with DTSC prior to Project approval.

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[4] PRC § 21002.1(c) (projects must comply with other laws).
[5] Ed. Code, §§ 17078.52 and 17213.1 *see also* DTSC, Environmental Assessments For Charter School Sites Fact Sheet available at https://dtsc.ca.gov/environmental-assessments-for-charter-school-sites-fact-sheet/
[6] Ed. Code §17213.1(a)(4)(B).
[7] City Planning Commission, February 23, 2023, Agenda Item 7, Day of Submissions, pdf. p. 66 available at https://planning.lacity.org/dcpapi/meetings/document/addtldoc/64833
[8] Bright Star Schools, 2022-2023 Budget Report on the Financial Statement ("Auditor's Report") (June 30, 2022) pp. 7 and 11. Available at https://brightstarschools.org/files/galleries/2022_Audited_Financials.pdf

C. The Project May Result in a Significant, Unmitigated Impact from Noise

We previously provided substantial evidence showing the MND's failure to provide an adequate baseline noise analysis, resulting in a failure to disclose the noise impacts from construction and operation of the Project. This remains a significant, unmitigated impact that the City has failed to disclose.

Additionally, CREED LA's experts determined that the Project's construction and operational noise impacts remain significant and unmitigated notwithstanding the mitigation measures proposed in the MND and the Project's conditions of approval. The City failed to resolve these issues before the City Planning Commission approved the Project.

D. The Project May Result in a Significant, Unmitigated Public Safety Impact

We previously provided substantial evidence showing the City failed to proceed in the manner required by law by failing to analyze consistency with the Mission Hills-Panorama City-North Hills Community Plan's public protection policies and lacks substantial evidence to support its conclusion that the Project's public services impacts would be less than significant. In particular, the City failed to analyze whether consultation with LAPD regarding the Project's design and layout will result in changes to the Project design or require additional police services to support the Project. A CEQA document must consider the effect of changes to the environment that can result from the expansion of services.[9] The City Planning Commission failed to require this analysis before approving the Project. The City Council must correct this error by requiring an EIR for the Project.

E. The City Planning Commission Erred in Making the Required Findings to Approve the Project

The Project requires a CUP to allow development of a public school in the RA-1 zone pursuant to LAMC § 12.24.[10] The MND fails to accurately disclose and mitigate significant impacts, as discussed in our comments to the City. Therefore,

[9] *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553.
[10] LAMC § 12.24(U)(24).

the Project fails to meet the LAMC requirements to obtain a CUP. LAMC § 12.24(E) requires the following findings be made to approve the CUP:

(1) that the project will enhance the built environment in the surrounding neighborhood or will perform a function or provide a service that is essential or beneficial to the community, city, or region;

(2) that the project's location, size, height, operations, and other significant features will be compatible with and will not adversely affect or further degrade adjacent properties, the surrounding neighborhood, or the public health, welfare, and safety; and

(3) that the project substantially conforms with the purpose, intent and provisions of the General Plan, the applicable community plan, and any applicable specific plan.

CREED LA demonstrated that the Project **will** adversely affect public health due to the Project's proximity to I-405 and the unmitigated impacts to future students and school staff, **will** adversely affect adjacent properties due to unmitigated noise impacts and, and **does not** comply with the applicable community plan by failing to consult with LAPD prior to Project approval.

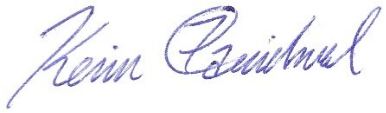
The City Planning Commission abused its discretion by making Finding No. Two and approving the Project despite substantial evidence in the record supporting a fair argument that the Project would adversely affect the surrounding neighborhood and affect public health, welfare, and safety.

III. CONCLUSION

As a result of these errors, the City Planning Commission's adoption of the MND, Findings, and Modified Conditions of Approval, and its approval of the Project's Conditional Use Permit and Site Plan Review violated CEQA and must be overturned.

We urge the City Council to grant CREED LA's appeal and order the preparation of an EIR for the Project. Thank you for your attention to this important matter.

Sincerely,



Kevin Carmichael

KTC:ljl

L6420-012j

EXHIBIT 1

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December 14, 2022

Via Email and Overnight Mail
Esther Ahn, Planner
Planning Department
City of Los Angeles
200 N. Spring St. Room 763
Los Angeles, CA 90012
Email: esther.ahn@lacity.org

Re: Comments on the Mitigated Negative Declaration for the Valor Elementary School Project (ENV-2022-5866-MND)

Dear Ms. Ahn:

On behalf of Coalition for Responsible Equitable Economic Development Los Angeles ("CREED LA"), we respectfully submit these comments on the City of Los Angeles' ("City") Mitigated Negative Declaration[1] ("MND") prepared for the Valor Elementary School Project (ENV-2022-5866-MND) ("Project") proposed by Bright Star Schools ("Applicant") and prepared pursuant to the California Environmental Quality Act ("CEQA")[2] by the City of Los Angeles ("City").

The Project proposes to construct a one and two-story, 26.5-foot-tall, elementary school building with 28 classrooms, totaling 23,538 square-feet. for grades transitional kindergarten ("TK") through 4; a 3,182 square-foot multi-purpose room, administrative spaces, corridors, storage spaces, and covered outdoor dining, and a surface parking lot with an ingress/egress driveway off Plummer Street.[3] The elementary school building would have a total building area of 34,755 sf and would accommodate a maximum enrollment of 552 students. The Project would also include 30,726 sf of open space and landscaping, including two play areas totaling 13,060 square-feet.

[1] City of Los Angeles, Mitigated Negative Declaration, Valor Elementary School Project ("MND") Case No: ENV-2022-5866-MND (November 2022) available at https://planning.lacity.org/odocument/4665dfef-ecad-42b5-80b6-575ca5e17851/ENV-2022-5866.pdf
[2] Public Resources Code § 21000 *et seq.*; 14 Cal. Code Regs. ("C.C.R.") §§ 15000 *et seq.*
[3] MND, p .1.

The Project site located at 15526-15544 Plummer Street, Los Angeles, CA 91343, on Assessor Parcel Numbers ("APN") 265-601-5007 and 265-601-5008, which are approximately 1.30 acres in size, and 0.76 acre in size respectively. The 1.30-acre parcel is currently undeveloped and covered with grasses, shrubs, and various mature trees, and the 0.76-acre parcel is currently developed with a one-story single-family residence with similar vegetation as the larger parcel. The site contains 56 trees/shrubs (including nine protected native trees/shrubs and 32 non-protected significant trees), and two street trees.

Our review of the MND demonstrates that the MND fails to comply with CEQA. As explained more fully below, the MND fails to accurately disclose the extent of the Project's potentially significant impacts on air quality, public health, hazards, public services, and noise. There is more than a fair argument that the Project will result in significant, unmitigated impacts in each of these areas. The City may not approve the Project until the City prepares an Environmental Impact Report ("EIR") that adequately analyzes the Project's potentially significant impacts and incorporates all feasible mitigation measures to avoid or minimize these impacts. As a result of these deficiencies, the City also cannot make the requisite findings to approve the Project under the City's municipal code.[4]

These comments were prepared with the assistance of environmental health, air quality, and GHG expert Dr. James Clark, Ph.D., and noise expert Ani Toncheva of Wilson Ihrig. Comments and curriculum vitae of Dr. Clark are attached to this letter as Attachment A.[5] Ms. Toncheva's comments and curriculum vitae are included as Attachment B.[6] Attachments A and B are fully incorporated herein and submitted to the City herewith. Therefore, the City must separately respond to the technical comments in Attachments A and B.

For the reasons discussed herein, and in the attached expert comments, CREED LA urges the City to remedy the deficiencies in the MND by preparing a legally adequate EIR and recirculating it for public review and comment.[7]

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[4] Pub. Res. Code § 21081; *Covington v. Great Basin Unified Air Pollution Control Dist*. (2019) 43 Cal.App.5th 867, 883.

[5] **Attachment A:** Comments on Valor Elementary School Project (December 13, 2022) ("Clark Comments").

[6] **Attachment B:** Comments on Valor Elementary School Project (December 14, 2022) ("Toncheva Comments").

[7] We reserve the right to supplement these comments at later hearings on this Project. Gov. Code § 65009(b); Public Resources Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199–1203; *see Galante Vineyards v. Monterey Water Dist*. (1997) 60 Cal.App.4th 1109, 1121.

I. STATEMENT OF INTEREST

CREED LA is an unincorporated association of individuals and labor organizations formed to ensure that the construction of major urban projects in the Los Angeles region proceed in a manner that minimizes public and worker health and safety risks, avoids, or mitigates environmental and public service impacts, and fosters long-term sustainable construction and development opportunities. The association includes the Sheet Metal Workers Local 105, International Brotherhood of Electrical Workers Local 11, Southern California Pipe Trades District Council 16, and District Council of Iron Workers of the State of California, along with their members, their families, and other individuals who live and work in the Los Angeles region.

Individual members of CREED LA live in the City of Los Angeles, and work, recreate, and raise their families in the City and surrounding communities. Accordingly, they would be directly affected by the Project's environmental and health, and safety impacts. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards that exist on site.

CREED LA has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making the area less desirable for new businesses and new residents. Continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

CREED LA supports the development of commercial, mixed use, and educational projects where properly analyzed and carefully planned to minimize impacts on public health, climate change, and the environment. These projects should avoid adverse impacts to air quality, public health, climate change, noise, and traffic, and must incorporate all feasible mitigation to ensure that any remaining adverse impacts are reduced to the maximum extent feasible. Only by maintaining the highest standards can commercial development truly be sustainable.

II. AN EIR IS REQUIRED

CEQA is designed to inform decision-makers and the public about the potential, significant environmental effects of a project.[8] "CEQA's fundamental goal [is] fostering informed decision-making."[9] "The purpose of CEQA is not to generate paper, but to compel government at all levels to make decisions with environmental consequences in mind."[10]

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an EIR, except in certain limited circumstances.[11] The EIR is the very heart of CEQA.[12] The EIR acts like an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return."[13] The EIR aids an agency in identifying, analyzing, disclosing, and, to the extent possible, avoiding a project's significant environmental effects through implementing feasible mitigation measures.[14] The EIR also serves "to demonstrate to an apprehensive citizenry that the [agency] has analyzed and considered the ecological implications of its action."[15] Thus, an EIR "protects not only the environment but also informed self-government."[16]

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment."[17] The EIR aids an agency in identifying, analyzing, disclosing, and, to the extent possible, avoiding a project's significant environmental effects through implementing feasible mitigation measures.[18] In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact. Because "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process" by allowing the agency to dispense with the duty to

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[8] 14 Cal. Code Regs. ("CEQA Guidelines") § 15002, subd. (a)(1).
[9] *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 402.
[10] *Bozung v. LAFCO* (1975) 13 Cal.3d 263, 283.
[11] See, e.g., Pub. Resources Code, § 21100.
[12] *Dunn-Edwards v. Bay Area Air Quality Management Dist.* (1992) 9 Cal.App.4th 644, 652.
[13] *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1220.
[14] Pub. Resources Code § 21002.1(a); CEQA Guidelines § 15002(a), (f).
[15] *No Oil, Inc. v. City of Richmond* (1974) 13 Cal.3d 68, 86.
[16] *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.
[17] Pub. Resources Code, § 21080, subd. (d) (emphasis added); CEQA Guidelines, § 15064; see also *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927; *Mejia v. City of Richmond* (2005) 13 Cal.App.4th 322.
[18] Pub. Resources Code, § 21002.1, subd. (a); CEQA Guidelines, § 15002, subd. (a) & (f).

prepare an EIR, negative declarations are allowed only in cases where there is not even a "fair argument" that the project will have a significant environmental effect.[19]

Under the fair argument standard, a lead agency "shall" prepare an EIR whenever substantial evidence in the whole record before the agency supports a fair argument that a project may have a significant effect on the environment.[20] The phrase "significant effect on the environment" is defined as "a substantial, or potentially substantial, adverse change in the environment."[21] In certain circumstances, a project with potentially significant impacts can be modified by the adoption of mitigation measures to reduce the impacts to a level of insignificance. In such cases, an agency may satisfy its CEQA obligation by preparing a mitigated negative declaration.[22] A mitigated negative declaration, however, is subject to the fair argument standard. Thus, an MND is inadequate, and an EIR is required, whenever substantial evidence in the record supports a "fair argument" that significant impacts may occur, even with the imposition of mitigation measures.

The "fair argument" standard is an exceptionally "low threshold" favoring environmental review in an EIR rather than a negative declaration.[23] The "fair argument" standard requires the preparation of an EIR if any substantial evidence in the record indicates that a project may have an adverse environmental effect.[24] As a matter of law, substantial evidence includes both expert and lay opinion.[25] Even if other substantial evidence supports the opposite conclusion, the agency nevertheless must prepare an EIR.[26] Under the "fair argument" standard, CEQA always resolves the benefit of the doubt in favor of the public and the environment.

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[19] *Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440; Pub. Resources Code, §§ 21100, 21064.
[20] Pub. Res. Code §§21080(d), 21082.2(d); 14 Cal. Code Reg. §§ 15002(k)(3), 15064(f)(1), (h)(1); *Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal.* (1993) 6 Cal.4th 1112, 1123; *No Oil, Inc. v. City of Richmond* (1974) 13 Cal.3d 68, 75, 82; *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-151; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1601-1602.
[21] Pub. Resources Code, § 21068.
[22] Pub. Resources Code, § 21064.5; CEQA Guidelines, § 15064, subd. (f)(2).
[23] *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 928.
[24] CEQA Guidelines, § 15064, subd. (f)(1); *Pocket Protectors v. City of Sacramento, supra*, 124 Cal.App.4th at 931.
[25] Pub. Resources Code, § 21080, subd. (e)(1); CEQA Guidelines, § 15064, subd. (f)(5).
[26] *Arviv Enterprises v. South Valley Area Planning Comm*. (2002) 101 Cal.App.4th 1333, 1346; *Stanislaus Audubon v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-151; *Quail Botanical Gardens v. City of Encinitas* (1994) 29 Cal.App.4th 1597.

III. SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT THE PROJECT MAY RESULT IN SIGNIFICANT IMPACTS REQUIRING AN EIR AND THE CITY LACKS SUBTANTIAL EVIDENCE TO RELY ON AN MND

A. There is a Fair Argument that the Project May Result in Significant, Unmitigated Health Risk Impacts

1. The City Failed to Proceed in the Manner Required by Law By Failing to Conduct a Preliminary Endangerment Assessment Pursuant to the California Education Code.

The MND includes a Phase I environmental site assessment ("ESA") report that identifies several recognized environmental conditions ("REC") and concludes that a Phase II ESA be completed for the site.[27] While a Phase II ESA was completed for the Project site, the City failed to conduct a Preliminary Endangerment Assessment as required under the California Education Code.[28]

The Education Code outlines a three-step process in assessing whether there has been a release of hazardous waste at a school site consisting of Step 1. Phase I ESA, Step 2. PEA, and Step 3. Response action.[29] The PEA required by Step 2 requires consultation with the Department of Toxic Substances Control ("DTSC") and to enter into an Environmental Oversight Agreement with DTSC, then contract with a qualified environmental consultant to prepare an assessment according to DTSC guidelines.[30] Here, the City failed to consult with DTSC in violation of the Education Code. Additionally, based on the results of the Phase I completed for the Project, there is a fair argument that if the City had consulted with DTSC, a PEA would be required. The City must retract the MND and proceed with consultation with DTSC to prepare a PEA for the Project.

2. The MND Fails to Disclose and Analyze the Potentially Significant Health Risk to Students and Staff from Air Emissions Released from Adjacent Sites

The MND fails to disclose the potential health impacts of placing schoolchildren next to existing sources of pollution located adjacent to the Project

[27] MND, Appendix F, p. v.
[28] Ed. Code §17213.1(a)(4)(B).
[29] *See* Ed. Code §§17213.1(a), 17213.1(a)(4), 17213.1(a)(7)
[30] Ed. Code §17213.1(a)(4)(B).

site. Dr. Clark found that there are a number of sources that emit toxic air contaminants including VOCs, diesel exhaust, and particulate matter permitted by the South Coast Air Quality Management District ("SCAQMD") surrounding the Project site.[31] According to the SCAQMD's Facility Information Detail ("FIND") website, there are at least 6 different permitted sites within ½ mile of the Project Site as seen in Figure 5 of Dr. Clark's comments.[32] The MND completely ignores these potential sources of pollution in its air quality analysis and as such fails as an informational document under CEQA.

3. There is Substantial Evidence Supporting a Fair Argument That the Project Will Result in Significant, Unmitigated Health Risks from Exposure to Freeway Emissions

The MND's statement that that health risks are less than significant is unsupported because the MND omits an analysis of several sources of pollution, resulting in underestimated emissions calculations. Dr. Clark reviewed the additional sources, and concludes that, when considered with the other emissions identified in the MND, the resulting health impacts on schoolchildren may be significant. The Project's health risk impacts must be accurately disclosed, analyzed, and mitigated in an EIR.

An agency must support its findings of a project's potential environmental impacts with concrete evidence, with "sufficient information to foster informed public participation and to enable the decision makers to consider the environmental factors necessary to make a reasoned decision."[33] A project's health risks "must be 'clearly identified' and the discussion must include 'relevant specifics' about the environmental changes attributable to the Project and their associated health outcomes."[34]

Dr. Clark found that the MND's health risk analysis is little more than a screening assessment of impacts based on unverifiable data. Additionally, he found the Project will result in a significant health risk to the students and staff at the Project site.

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[31] Clark Comments, p. 7.
[32] Clark Comments, p. 7.
[33] *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 516.
[34] *Id*. at 518.

First, Dr. Clark notes that the input files for the Project's HRA were not included in the attachments to the HRA.[35] The Project's HRA states:

> TAC emissions associated with vehicle traffic on I-405 were estimated based on the methodology and spreadsheet developed by the UC Davis-Caltrans Air Quality Project, Estimating Mobile Source Air Toxics Emissions [MSAT]: A Step-By-Step Project Analysis Methodology (2006). This spreadsheet was designed to estimate the total amount of the six pollutants of concern discussed in Section 2.2, Toxic Air Contaminants, based on total organic gases emission factors and diesel particulate emission factors from EMFAC2021… The spreadsheet outputs from the UC Davis-Caltrans MSAT model and composite emission rates are contained in Appendix A.[36]

However, these spreadsheets were not included with the HRA and as such act as a black-box precluding analysis of the sufficiency of the HRA by preventing validation of the HRA model inputs.[37]

Dr. Clark used the same input parameters listed in the AERMOD input file utilized in the HRA for the Project and found that I-405 produces concentrations of TACs at the Project Site that are 1.5 times higher than presented in the HRA, resulting in a significant, unmitigated impact.[38]

Additionally, while reviewing the AERMOD model inputs used in the HRA, Dr. Clark found that the AERMOD analysis relies on source terms from a model that is not commonly used to assess emissions from freeways and excludes components in the analysis including the actual assumed emission rate of each chemical of concern ("COC") from each class of vehicle moving along I-405. By using an uncommon methodology and omitting the spreadsheets necessary to verify the HRA, the City fails to adequately analyze the Project's health risk impacts.

Finally, according to Dr. Clark, analyses of health risks from I-405 emissions feature a critical flaw leading to inaccurate estimations of Project emissions. The MND's AERMOD modeling calculations of ground-level concentrations of DPM fail to account for building downwash, which occurs when the wind flows over and around buildings and impacts the dispersion of pollution from nearby sources.[39] The

[35] Clark Comments, p. 8.
[36] MND, Appendix B, PDF p. 12.
[37] Clark Comments, p. 9.
[38] Clark Comments, p. 9.
[39] Clark Comments, p. 31.

MND's air quality analysis fails to explain why building elevations were not considered in the HRA. An updated HRA that accounts for elevation differences must be prepared and included in an EIR.

The City must prepare a new HRA that properly identifies the inputs and methodology used to calculate the operational health risk of the Project.

B. The City Lacks Substantial Evidence to Support the MND's Conclusion that Noise Impacts Would Be Less Than Significant with Mitigation

The CEQA Guidelines require an MND to consider "whether a project would result in…[g]eneration of a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project . . ."[40] The MND's noise analysis fails to accurately disclose the Project's potentially significant noise impacts and fails to mitigate them. Ms. Toncheva concludes that the Project's construction and operational noise impacts remain significant and unmitigated notwithstanding the mitigation measures proposed in the MND. Ms. Toncheva's comments provide substantial evidence supporting a fair argument that an EIR is required to accurately disclose and mitigate these impacts.

1. The MND Fails to Establish an Adequate Baseline to Measure Project Noise Impacts.

CEQA directs a lead agency to find that a Project would result in a significant impact if the Project would result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.[41] In order to establish a baseline to measure noise impacts it is common practice to conduct measurements of ambient noise at locations surrounding a proposed project. Here, the MND's noise impact analysis is based on two measurements of only 15 minutes each[42] and one 14-hour long-term measurement on May 25th and 26th.[43] Ms. Toncheva explains that the limited data collected to evaluate the Project's noise impacts may not be representative of the loudest times of day because the noise environment is affected by transportation sources that can change from hour to hour and day to day.[44] Ms. Toncheva states

[40] CEQA Guidelines, Appendix G, Sec. XII(d).
[41] CEQA Guidelines, Appendix G.
[42] MND, p. 102.
[43] MND, p. 103.
[44] Toncheva Comments, p. 1.

that best practices call for documentation of the existing condition with measurements at different times over several days.[45] Furthermore, the long-term noise measurement purports to document these changes, but the measurement was taken from the back of the project site where it is partially shielded from both nearby streets and does not capture traffic patterns at residences close to Plummer Street.[46] Ms. Toncheva found that the short-term Leq at location ST-1 is more than 10 dB higher than the same time frame at LT-1.[47] Therefore, the long term measurement taken for the Project's noise analysis are not representative of the noise environment surrounding the Project.

Ms. Toncheva states in her comments that higher baseline noise levels at the residences on Plummer Street would result in a noise environment that exceeds the normally acceptable CNEL levels for single-family homes per the Land Use and Noise Compatibility Matrix.[48] The City must prepare an updated baseline analysis that incorporates noise measurements taken at locations surrounding the Project site over a multi-day period in order to properly establish the baseline used in the noise analysis.

2. The MND Fails to Analyze Impacts to All Relevant Noise-Sensitive Receptors

The MND fails to accurately analyze the severity of construction noise impacts on sensitive receptors because it relies on incorrect distances between on-site noise sources and off-site receptors. Ms. Toncheva explains that this error is due to the MND's failure to properly acknowledge how construction sites operate in the MND's selection of where to measure noise levels in relation to sensitive receptors.

The construction noise calculations use a minimum receptor distance of 50 feet, per the cited LAMC threshold. However, multiple phases of ongoing construction activity, including grading work, may be as close as 6 feet from the adjacent residences, resulting in higher Lmax levels (108 dB).[49]

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[45] Toncheva Comments, p. 1.
[46] Toncheva Comments, p. 1.
[47] Toncheva Comments, p. 1.
[48] Toncheva Comments, p. 1. *see also* MND, p. 105.
[49] Toncheva Comments, p. 2.

Ms. Toncheva modeled the Project's construction noise at 15516 Plummer Street, which is a single-family residence adjacent to the project site and 6 feet east of the project boundary, using the Federal Highway Administration's ("FHWA") Roadway Construction Noise Model ("RCNM") and found that the Project would result in a 30+ dBA increase over the MND noise threshold during construction [50]

Given this failure of analysis the MND failed to accurately assess the severity of the Project's noise impacts on all sensitive receptors, and fails to adequately mitigate them. The City must prepare an EIR to accurately analyze and mitigate these impacts.

3. Mitigation Measures Fail to Reduce Noise Impacts Below Levels of Significance

The MND concludes that noise impacts will be less than significant with implementation of mitigation measure RCM-1, which requires that a barrier be erected during construction.[51] However, this measure is less effective than asserted in the MND. Ms. Toncheva notes that the 12-foot barrier would result in a dBA reduction of 15, which will not be enough to reduce the impacts to nearby sensitive receptors to non-significant levels.[52]

Ms. Toncheva found that the mitigation offered by the MND is wholly insufficient. She explains that a reduction of even 15 dBA (the maximum reduction that mitigation measure RCM-1 would provide) is inadequate to mitigate noise impacts at the nearby residences of the Project.[53] Ms. Toncheva explains that these errors were the result of the City's reliance on the incorrect interpretation of Municipal Code noise standards, as discussed above. As a result, the noise mitigation proposed in the MND will be ineffective to reduce noise impacts below levels of significance and is not adequate to support a finding of no significant impact with mitigation.

4. The MND Fails to Analyze Operational Noise Impacts

The MND does not provide a quantitative analysis for noise from on-site operations such as activity in the play area, trash-hauling, or traffic noise and other activity during pick up/drop off along the driveway directly adjacent to residences.

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[50] Toncheva Comments, p. 3.
[51] MND, pp. 108-109.
[52] Toncheva Comments, p. 2.
[53] Toncheva Comments, p. 2.

Ms. Toncheva notes that these activities may result in an increase of 5 dB or more over the ambient, resulting in a significant impact. The City must conduct a quantified noise analysis to determine if additional mitigation measures are necessary to reduce the Projects potentially significant operational noise impacts.

C. The MND Fails to Analyze and Mitigate the Project's Potentially Significant Energy Impacts

The MND is inadequate as an environmental document because it fails to properly disclose, analyze, and mitigate the Project's potentially significant impacts on energy use. The City cannot approve the Project until an EIR is prepared and circulated to resolve these issues and comply with CEQA's requirements. Namely, the City's construction energy analysis fails to quantify and adequately assess the Project's energy consumption impacts during Project construction.

The MND states that Project construction energy use would result through the consumption of gasoline and diesel fuel. The energy use analysis does not analyze electricity use from the existing power grid despite the requirement under mitigation measure AQ-1 which stipulates that "[e]lectricity shall be supplied to the site from the existing power grid to support the electric construction equipment."[54] Electricity use from the existing power grid is not included or analyzed in the Project's construction energy use analysis. As a result, the MND lacks substantial evidence to conclude that construction-phase impact related to energy consumption would be less than significant.[55]

The City must revise the construction energy use analysis to include the expected electricity use and include the results of the analysis in an EIR.

D. The MND Fails to Account for the Public Services That Will Be Needed to Support the Project

An MND must consider the effect of changes to the environment that can result from the expansion of services.[56] Here, the MND states that the Project would not place an unanticipated burden on police protection services.[57] However, the MND fails to include any information or analysis on how this conclusion was reached.

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[54] MND, p. 48.
[55] MND, p. 63.
[56] *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553.
[57] MND, p. 116.

Additionally, the Project is within the Mission Hills-Panorama City-North Hills Community Plan ("Community Plan") Area which includes goals and objectives to ensure proper police protection of new developments.[58] The Community Plan includes the following policies and related programs that are applicable to the Project:

- 8-2.2 Ensure that landscaping around buildings be placed so as not to impede visibility.
    - Program: Discretionary land use reviews and approvals by the Department of City Planning with consultation from the Los Angeles Police Department.

- 8-2.3 Ensure adequate lighting around residential, commercial, and industrial buildings in order to improve security.
    - Program: Discretionary land use reviews and approvals by the Department of City Planning with consultation from the Los Angeles Police Department.[59]

Policies 8-2.2 and 8-2.3 both include a program requirement that consultation be completed with LAPD as part of a project's land use review process in order to ensure the safety of the future occupants of a project, in this case children and teachers primarily. However, the MND does not include any analysis of the Project's conformance with the Community Plan and provides no evidence that the required consultation has been completed. Instead, the MND states that the "Project would comply with all applicable regulations required by the LAPD during the plan check process."[60]

This approach improperly defers required analysis of the Project's potential impacts to public services that may be uncovered during LAPD's review of the Project and defers mitigation measures that may be required through consultation with LAPD. As a result, the MND fails to demonstrate consistency with mandatory public protection policies in the Community Plan, in violation of CEQA and land use law.

[58] City of Los Angeles, Mission Hills-Panorama City-North Hills Community Plan (1999) p. III-16, available at https://planning.lacity.org/odocument/fee68461-843f-48da-92e9-49a01d1f09e3/Mission_Hills-Panorama_City-North_Hills_Community_Plan.pdf
[59] Community Plan, p. III-16.
[60] MND, p. 116.

For example, LAPD's review of the project may find that additional lighting is necessary for the Project to protect the students and staff, this would in turn increase the Project's energy use and GHG impacts. Similarly, consultation with LAPD may require alteration to the Project's landscaping plan changing the number of protected trees and shrubs to be replaced resulting in nonconformance with the City's tree protection policies.[61] The MND is silent on these issues.

Given the massively significant impacts that crime, violence, and shootings at schools have wreaked on American children and their families in recent years, it is incumbent on the City to take every feasible step to ensure that schools are built safely and in compliance with all Police Department land use policies. The MND's failure to demonstrate compliance with Policies 8-2.2 and 8-2.3 is inexcusable.

The City failed to proceed in the manner required by law by failing analyze consistency with the Community Plan's public protection policies and lacks substantial evidence to support its conclusion that the Project's public services impacts would be less than significant. The City must complete the required consultation with LAPD and analyze the environmental impacts of any required Project design changes to the Project in an EIR.

E. The MND Fails to Mitigate Potentially Significant Impacts to Protected Species and Failed to Consult with Responsible Wildlife Agencies

The MND states that the Project would result in the removal of 9 protected native trees and 32 non-protected significant trees.[62] Eight of the protected trees to be removed are Southern California black walnut trees [*Juglans californica*] which are listed by the California Department of Fish and Wildlife in the California Natural Diversity Database ("CNDDB") on the Special Vascular Plants, Bryophytes, And Lichens List[63] and recognized by the United States Department of Agriculture as "severely threatened by urbanization. According to the USDA, the Nature Conservancy, in cooperation with the state of California, is giving high priority to acquiring vegetative/habitat data on the woodland and is listed as one of

[61] "[P]rotected tree/shrub removals would be replaced at a 1:4 ratio by planting 36 trees on-site. Non-protected tree removals would be replaced at a 1:1 ratio by planting 32 trees on-site." MND, p. 20
[62] MND, p. 54.
[63] California Department of Fish and Wildlife, Biogeographic Data Branch, California Natural Diversity Database, Special Vascular Plants, Bryophytes, And Lichens List (October 2022) available at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline

California's rare and imperiled natural communities.[64] CDFW regularly provides comments on projects that deal with removal of South Coast black walnut. However, it is not clear whether the CDFW was consulted as a trustee agency for this Project.

Under CEQA, a project that affects the habitat of an endangered, rare, or threatened species is considered to be a project of statewide significance that requires state agency review of a CEQA document prepared for the project.[65] In addition, when preparing its CEQA document, the lead agency must consult with CDFW and obtain written findings from CDFW on the impact of the project on the continued existence of any State-listed endangered or threatened species.[66]

The CDFW regularly provides substantive comments and recommendations to the City regarding the removal of South Coast black walnut trees. For example, a recent City of Los Angeles project, The James Street Four (4) Single-Family Residences, Case Number: ENV-2018-1130-MND[67], which required the removal of 11 Southern California Black Walnut trees did include consultation with the CDFW resulting in the following recommended mitigation measures:

- Mitigation Measure #2: CDFW recommends the City work with a certified arborist familiar with Southern California black walnut tree life history to update the Protected Tree Report and Tree Locations on Project Landscaping Plan for 434, 438, and 442 West James Street. Specifically, CDFW recommends modifying the plans to reflect a total of 20 replacement Southern California black walnut trees appropriately spaced to accommodate growth horizontally, vertically, and laterally below ground. CDFW also recommends that each landscaping plan and/or Protected Tree Report be updated to disclose/provide planting instructions specifying appropriate spacing between each replacement tree. [68]

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[64] U.S.D.A., Fire Effects Information System, Index of Species Information, *Juglans californica*, available at https://www.fs.usda.gov/database/feis/plants/tree/jugcal/all.html
[65] 14 CCR § 15206(b)(5). "A project which would substantially affect sensitive wildlife habitats including but not limited to riparian lands, wetlands, bays, estuaries, marshes, and habitats for endangered, rare and threatened species as defined by Section 15380 of this Chapter."
[66] PRC § 21104.2.
[67] City of Los Angeles, James Street Four (4) Single-Family Residences MND, SCH 2020100088 (October 6, 2020) available at https://ceqanet.opr.ca.gov/2020100088/2
[68] California Department of Fish and Wildlife, Letter re James Street Four (4) Single-Family Residences, MND, SCH #2020100088, City of Los Angeles, Los Angeles County (November 9, 2020) p. 3. available at https://files.ceqanet.opr.ca.gov/265078-2/attachment/cjEnN_Le0w7OINF2hj__LUpxX0DG-Af32QhutP1XGnwh8DFEvrYIyXncLOILCv5RJD4GRhuEoXopL13p0

- Mitigation Measure #3: CDFW recommends that trees planted for mitigation be monitored, maintained, and inspected as described in the Protected Tree Report. CDFW recommends long-term monitoring, maintenance, and inspection until all planted trees survive to produce reproductive structures (i.e., catkins). [69]

- Mitigation Measure #4: If the City observes changes, stress, or failure of planted Southern California black walnut trees, as recommended in the Protected Tree Report, CDFW recommends consulting with a certified arborist or tree specialist to assess the tree and provide specific recommendations. There should be no net loss of Southern California black walnut trees. If any replacement trees fail, CDFW recommends City replace those trees until a minimum of 20 total trees survive to produce catkins.[70]

The City failed to submit the MND to the State Clearinghouse ("SCH") and consult with CDFW as a trustee agency, as required under CEQA. When questioned by the California Office of Planning and Research why the Project was not submitted to the SCH, the City's internal email exchange shows that they determined that the Project was not affected by CCR §§ 15205 and 15206.[71] The City has violated CEQA by failing to submit the MND to the SCH and failing to consult with CDFW.

IV. THE CITY LACKS SUBSTANTIAL EVIDENCE TO APPROVE THE PROJECT'S LOCAL LAND USE PERMITS

A. The City Cannot Approve the Project's Conditional Use Permit

The Project seeks approval of a Conditional Use Permit to allow development of a public school in the RA-1 zone ("CUP") pursuant to LAMC § 12.24.[72] The MND fails to accurately disclose and mitigate significant impacts, as discussed herein. Therefore, the Project currently fails to meet the LAMC requirements to obtain a CUP. LAMC § 12.24(E) requires the following findings be made to approve the CUP:

> (1) that the project will enhance the built environment in the surrounding neighborhood or will perform a function or provide a service that is essential or beneficial to the community, city, or region;

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[69] *Id,* at p. 4
[70] *Ibid.*
[71] **Exhibit C**: Email from Maria Reyes, City of Los Angeles to Esther Ahn, City of Los Angeles, re: SCH Number (New SCH Number), (November 22, 2022).
[72] LAMC § 12.24(U)(24).

(2) that the project's location, size, height, operations, and other significant features will be compatible with and will not adversely affect or further degrade adjacent properties, the surrounding neighborhood, or the public health, welfare, and safety; and

(3) that the project substantially conforms with the purpose, intent and provisions of the General Plan, the applicable community plan, and any applicable specific plan.

The Project as analyzed above **will** adversely affect public health due to the Project's proximity to I-405 and the unmitigated impacts to future students and school staff, **will** adversely affect adjacent properties due to unmitigated noise impacts and, and **does not** comply with the applicable community plan by failing to consult with LAPD prior to Project approval.

Additionally, the MND's analysis of air quality ignores substantial evidence that the Census Tract 6037117201, which contains the Project site, is a designated disadvantaged community under Senate Bill 535.[73]

Census tract 6037117201 is in the top 10th percentile of communities impacted by diesel particulate matter, the top 6th percentile of communities impacted by traffic, and the top 5th percentile of communities impacted by ozone in the State of California.[74] The City must reanalyze the air quality and health risk impacts of the Project and consider the public well-being of this already burdened community in an EIR. Given the Project's location in a region with one of the nation's worst records for air quality, in a disadvantaged community already overly burdened by exposure to harmful air contaminants, it is impossible to find that the Project is consistent with the Municipal Code. The Project cannot be found to not adversely affect the public health, welfare and safety of students and staff present at the Project site. The City must prepare an EIR that includes a statement of overriding considerations to justify the use of the Project site.

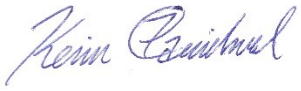
[73] California Office of Environmental Health Hazard Assessment, SB 535 Disadvantaged Communities (2022) available at https://oehha.ca.gov/calenviroscreen/sb535
[74] Clark Comments, p. 4.

V. CONCLUSION

For the reasons discussed above, the MND for the Project remains wholly inadequate under CEQA. There is substantial evidence supporting a fair argument that the Project has numerous potentially significant, unmitigated impacts. The City must prepare and circulate an EIR to provide legally adequate analysis of, and mitigation for, all of the Project's potentially significant impacts. Until the City prepares an EIR, the City may not lawfully approve the Project.

Thank you for your attention to these comments. Please include them in the record of proceedings for the Project.

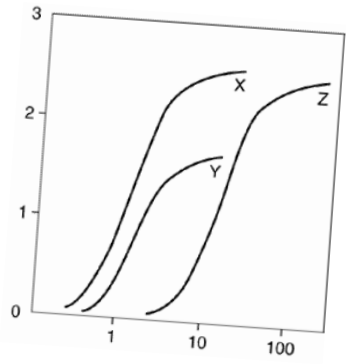
Sincerely,



Kevin Carmichael

KTC:ljl

EXHIBIT A



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December 13, 2022

Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Attn: Mr. Kevin Carmichael

Subject: Comments On Initial Study/Mitigated Negative Declaration (IS/MND) For Valor Elementary School Project, Los Angeles, CA 91343 Case Number: ENV-2022-5866-MND

Dear Mr. Carmichael:

At the request of Adams Broadwell Joseph & Cardozo (ABJC), Clark and Associates (Clark) has reviewed materials related to the 2022 City of Los Angeles' (the City's) draft environmental impact report ("DEIR") of the above referenced project.

Clark's review of the materials in no way constitutes a validation of the conclusions or materials contained within the plan. If we do not comment on a specific item this does not constitute acceptance of the item.

Project Description:

According to the City, Bright Star Schools (the "Applicant") proposes to redevelop the site located at 15526-15544 Plummer Street ("Project Site" or "Site), which encompasses approximately 2.06 acres (approximately 89,629 square feet [sf]), into an elementary school. The Site consists of two parcels identified by Assessor Parcel Number (APN) 265-601-5007, which is approximately 1.30 acres in size, and APN 265-601-5008, which is approximately 0.76 acre in size.

The Project Site is in an urbanized area. Land uses surrounding the Project Site include Plummer Street to the north, with single-family residences beyond; single- and multi-family residences to the east, with an apartment building for senior citizens (Plummer Village) and

commercial uses beyond; single- and multi-family residences to the south, with Vincennes Street beyond; and single-family residences to the west, with Orion Avenue beyond. The Project Site is also located approximately 440 feet east of Interstate 405 (I-405).

Figure 1: Site Location

The Valor Elementary School Project ("Proposed Project" or "Project") involves the construction of a one and two-story, 26.5-foot-tall, elementary school building with 28 classrooms (totaling 23,538 sf) for grades transitional kindergarten (TK) through 4; a multi-purpose room (totaling 3,182 sf); administrative spaces (totaling 1,616 sf); corridors, storage spaces, and covered outdoor dining (totaling 6,419 sf); and a surface parking lot with an ingress/egress driveway off Plummer Street. The elementary school building would have a total building area of 34,755 sf and would accommodate a maximum enrollment of 552 students. The Project would also include 30,726 sf of open space and landscaping, including two play areas (totaling 13,060 sf), a kindergarten play area (totaling 1,300 sf).

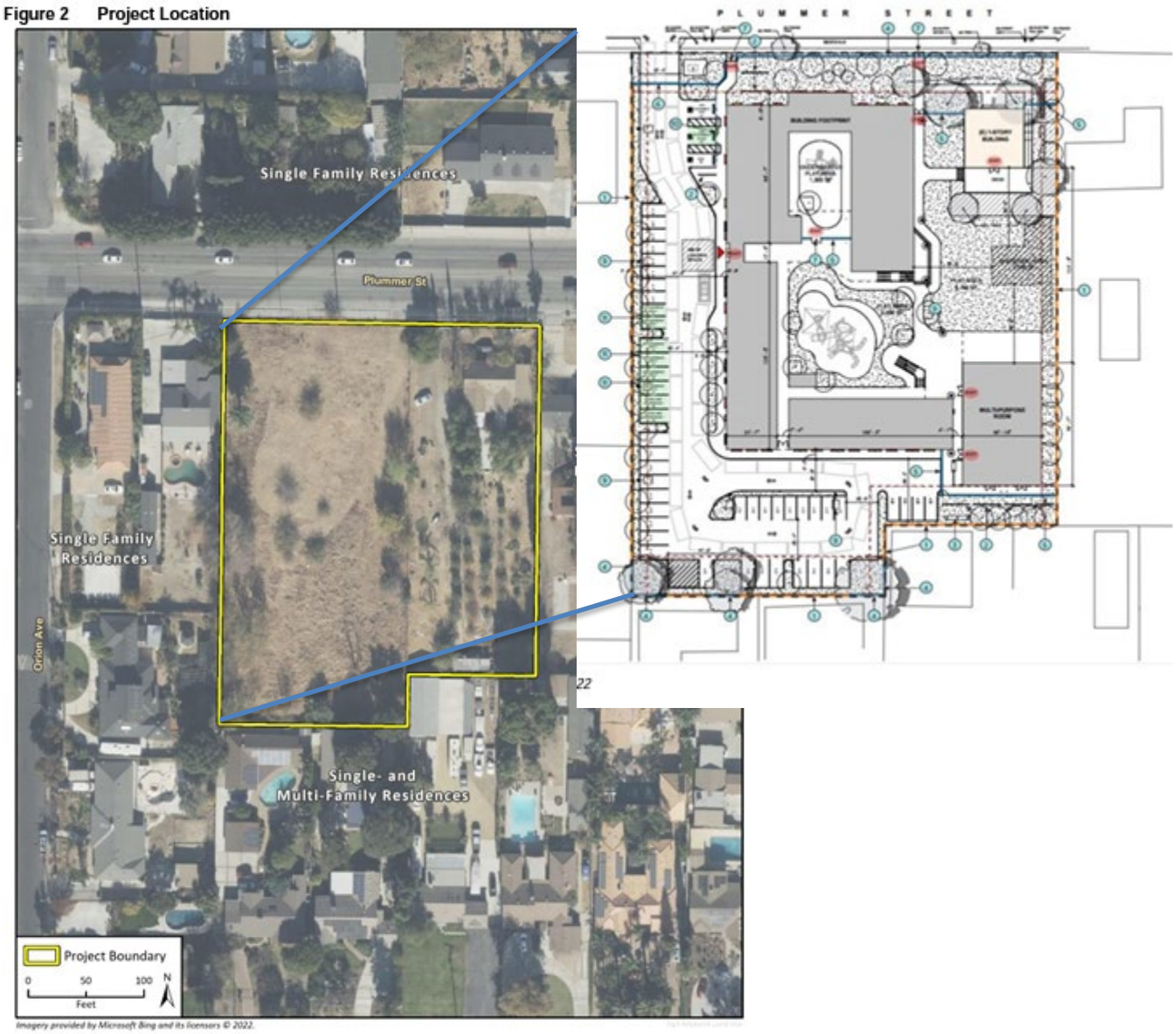

Figure 2: Project Location and Site Plan

Project construction is expected to commence in September 2023. Construction activities would occur on weekdays between 8:00 a.m. and 3:00 p.m. The Project would require excavation of approximately 12,500 cubic yards (cy) of soil material. Of the 12,500 cy of soil, approximately 10,000 cy would be used as fill and redistributed on-site and the remaining 2,500 cy would be exported off the Site.

There are potentially significant air quality and public health impacts that are not addressed in the City's analysis that must be addressed in a draft environmental impact report ("DEIR").

Specific Comments:

1. The City's Air Quality Analysis Fails To Consider The Existing Air Quality Burden In The Already Impacted Census Tract.

The City's analysis of pollutants in this section of the response ignores substantial evidence from publicly available data demonstrating that the census tract in which the Project Site resides is in the top 10th percentile for pollution burden, traffic, and DPM exposure in California. Under Senate Bill 535 (SB 535), the California Environmental Protection Agency (CalEPA) was charged with identifying disadvantaged communities. CalEPA was tasked with basing the designations on geographic, socioeconomic, public health, and environmental hazard criteria. In response, CalEPA's Environmental Health and Hazard Assessment (OEHHA) compiled the CalEnviroScreen data tool. CalEPA generally defines communities in terms of census tracts and identifies four types of geographic areas as disadvantaged: (1) census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0; (2) census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps, but receiving the highest 5 percent of CalEnviroScreen 4.0 cumulative pollution burden scores; (3) census tracts identified in the 2017 DAC designation as disadvantaged, regardless of their scores in CalEnviroScreen 4.0; (4) and areas under the control of federally recognized Tribes.

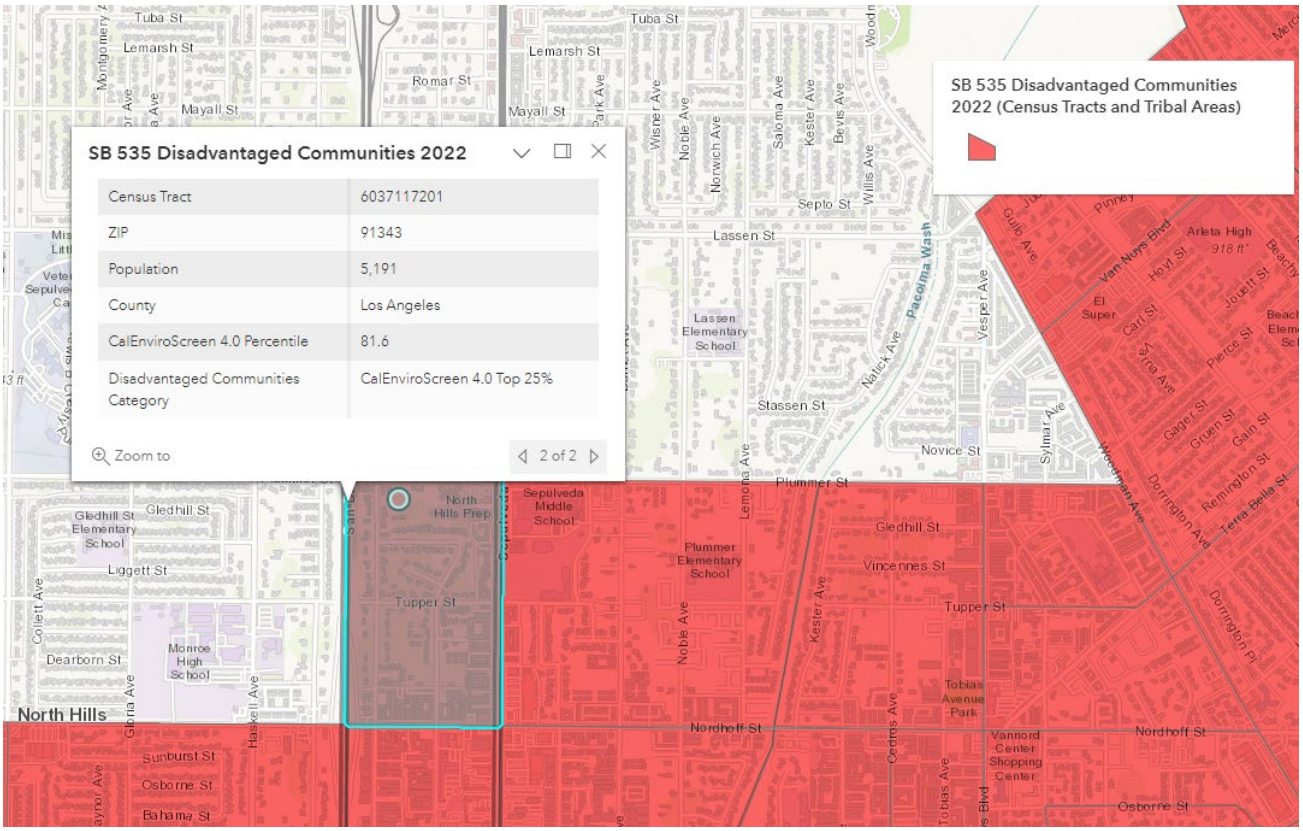

Figure 3: CalEnviroScreen 4.0 Analysis Of Census Tract 6037117201

The designation for Census Tract 6037117201, which contains the Project Site, shows that the Census Tract is a designated disadvantaged community under SB 535.

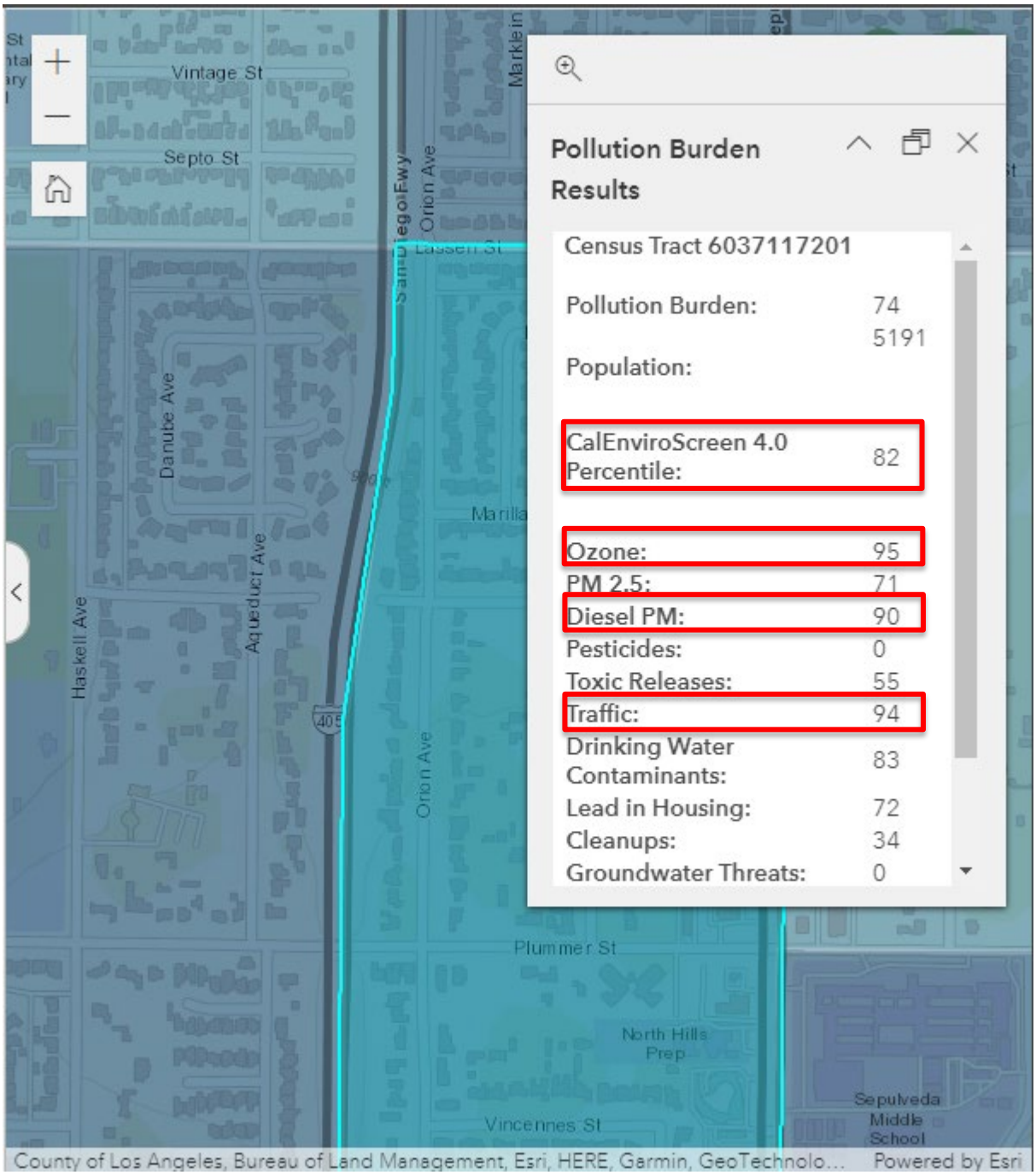

Figure 4: CalEnviroScreen 4.0 Pollution Burden Results For Project Site Location

Census tract 6037117201 is in the top 10th percentile of communities impacted by diesel particulate matter, the top 6th percentile of communities impacted by traffic, and the top 5th percentile of communities impacted by ozone in the State of California. The City must reanalyze the air quality and traffic impacts of the Project and consider the public well-being of this already burdened community in an environmental impact report (EIR).

2. The IS/MND Fails To Consider The Impacts Of Adjacent Sites On The Project Site And Does Not Comply With The California Education Code Regarding The Assessment Of Environmental Contaminants At Proposed School Sites.

The IS/MND fails to consider the impacts of the adjacent sites on the Project site. Immediately adjacent to the Project site are a number of sources that are permitted by the South Coast Air Quality Management District (SCAQMD). According to the SCAQMD's Facility Information Detail (FIND) website, there are at least 6 different permitted sites within ½ mile of the Project Site. The sites emit a number of potential toxic air contaminants including VOCs, diesel exhaust, and particulate matter.

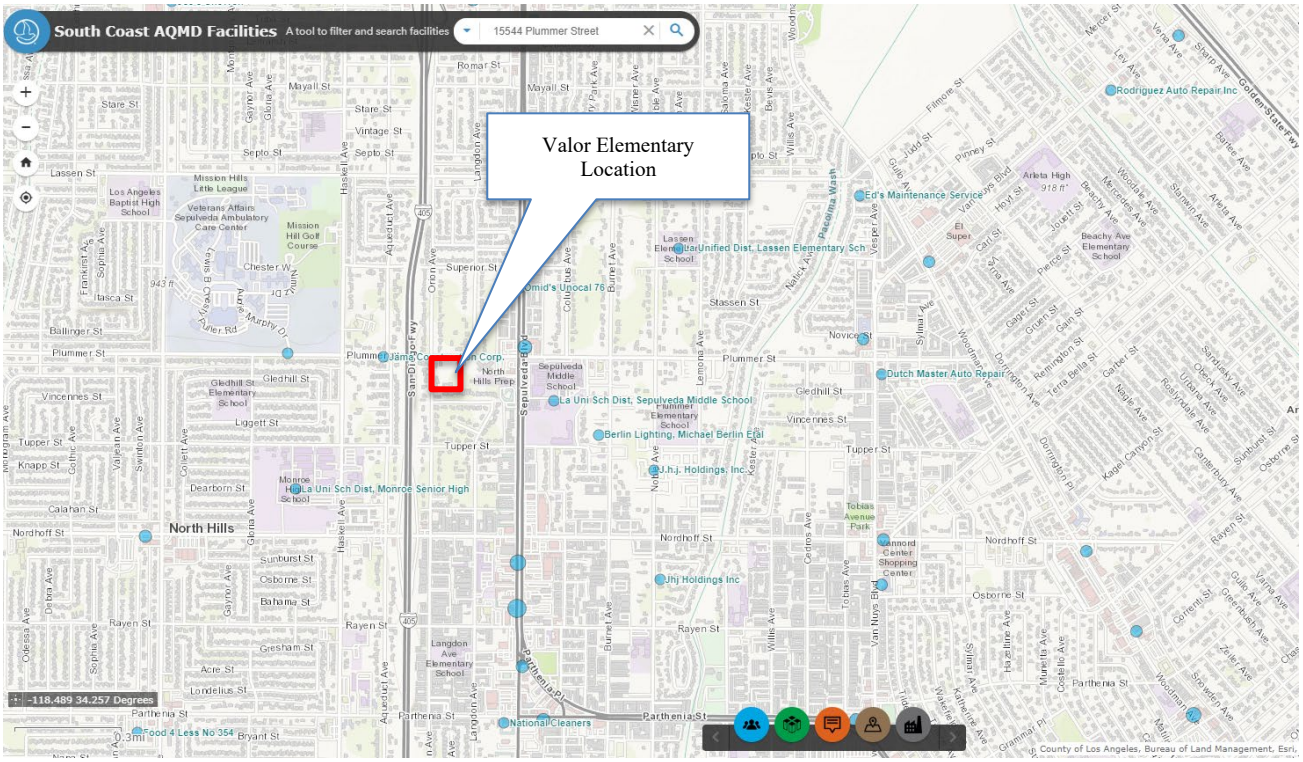

Figure 5: SCAQMD FIND Results For Permitted Facilities Near Project Site

In addition to failing to assess the impacts of offsite emissions on the students and staff that will be using the Project Site, the City has failed to comply with the California Education Code requirements for assessing whether there has been a release of hazardous wastes at the school site or if the hazardous materials reaching the school site pose a health risk to the sensitive receptors present at the site. Using the three step process outlined by the DTSC Site Mitigation and Restoration Program's Schools Unit (Step 1: Phase 1 Environmental Site Assessment; Step 2: Preliminary Endangerment Assessment (PEA); and, Step 3: Response Action) it is clear that the City and the

Proponent have failed to perform the necessary analysis of health risks from chemicals that will impact the students at this time. According to the DTSC's website:

> "A Preliminary Environmental Assessment is required when there is potential contamination on the school site. This can be determined through a Phase I Environmental Site Assessment or districts may elect to proceed directly to a Preliminary Environmental Assessment based on site knowledge (Ed. Code, § 17213.1, subsec. (a)(4)(B)). The assessment includes collection of environmental samples and evaluation of potential health risks. School districts enter into an Environmental Oversight Agreement with DTSC, then contract with a qualified environmental consultant to prepare an assessment according to DTSC guidelines. The assessment includes preparation of a work plan, collection and analysis of environmental samples, and preparation of a Preliminary Environmental Assessment report; (Ed. Code, § 17210, subsec. (b) and § 17213.1, subsec. (a)(4)(B)). The report includes results of environmental sampling and a health risk assessment conducted according to DTSC guidelines (Ed. Code, § 17213.1, subsec. (a)(4)(B)). As required by the Education Code (Ed. Code, § 17213.1, subsec. (a)(6)), school districts must make the report available for public review and comment before DTSC's final determination. DTSC is required to approve or disapprove the Preliminary Environmental Assessment Report within 30 days of close of public review period (Ed. Code, § 17213.1, subsec. (a)(6)(A)) or within 30 days of the school district's approval of the Environmental Impact Report for the school (Ed. Code, § 17213.1, subsec. (a)(6)(B)). If the assessment identifies no significant health or environmental risks, the school district will receive a "No Further Action" determination letter from DTSC (Ed. Code, § 17213.1, subsec. (a)(9)) and the process is complete. If the assessment identifies potential contamination, further action will be required."

Clearly the City and the Applicant have failed to meet their requirements to assess all risks to students and staff under the Education Code and must complete a PEA, which includes its own Health Risk Analysis (HRA), prior to the preparation of the IS/MND. The City must immediately move to an EIR to assess those risks and develop a comprehensive remediation plan to ensure the health and safety of the sensitive receptors on site.

3. The City Has Failed To Provide All Of The Necessary Appendices And Worksheets To The Health Risk Analysis Of The Freeway Emission Impacts To Allow For Validation Of The City's Analysis

A review of the Appendix B to this IS/MND, the Health Risk Analysis for the Project, references files not included in the final report. According to Section 3.1.1. Air Dispersion Modeling of Appendix B, "TAC emissions associated with vehicle traffic on I-405 were estimated based on the

methodology and spreadsheet developed by the UC Davis-Caltrans Air Quality Project, Estimating Mobile Source Air Toxics Emissions [MSAT]: A Step-By-Step Project Analysis Methodology (2006). This spreadsheet was designed to estimate the total amount of the six pollutants of concern discussed in Section 2.2, Toxic Air Contaminants, based on total organic gases emission factors and diesel particulate emission factors from EMFAC2021… The spreadsheet outputs from the UC Davis-Caltrans MSAT model and composite emission rates are contained in Appendix A." Appendix A to the HRA is listed as the AERMOD Output Files. The failure to include the referenced spreadsheet(s) makes it impossible to validate the model inputs.

4. The City's Reliance On Local Significance Thresholds (LSTs) Ignores The Substantial Impacts To Residents Near The Project

According to the City of Los Angeles' 2019 Air Quality and Health Effects Guidance, airborne pollutants that may be expected to result in an increase in mortality or serious illness or which may pose a present or potential hazard to human health, and include both carcinogens and non-carcinogens defined as TACs.[1] Diesel exhaust, in particular DPM, is classified by the State of California as a TAC. The determination of a significance threshold is based on a ***quantitative risk analysis*** that requires the City to perform a multistep, quantitative health risk analysis for TACs. [2] Despite this clear guidance, no effort is made in the IS/MND to quantify the potential health impacts from emissions generated by construction activities or operational activities from the Project on these sensitive receptors.

According to SCAQMD[3], LSTs are only applicable to criteria pollutants: oxides of nitrogen (NO_X), carbon monoxide (CO), particulate matter less than 10 microns in aerodynamic diameter (PM_{10}) and particulate matter less than 2.5 microns in aerodynamic diameter ($PM_{2.5}$), not to TACs. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

[1] City of Los Angeles. 2019. Air Quality and Health Effects Guidance. Pg 6.

[2] City of Los Angeles. 2019. Air Quality and Health Effects Guidance. Pg 9, pg 36.

[3] http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds

For TACs, there are no LSTs, nor levels of significance based on the pounds per day. According to the City of Los Angeles' 2019 Air Quality And Health Effects Guidance airborne pollutants that may be expected to result in an increase in mortality or serious illness or which may pose a present or potential hazard to human health, and include both carcinogens and non-carcinogens are defined as toxic air contaminants.[4] Diesel exhaust, in particular diesel particulate matter, is classified by the State of California as a toxic air contaminant. Instead, the determination of a significance threshold is based on a ***quantitative risk analysis*** that requires the City to perform a multistep, quantitative health risk analysis for TACs. [5]

The City failed to perform this analysis, and therefore lacks supporting evidence for its conclusion that the Project would not result in significant health effects. The City's failure to perform such an analysis is clearly a major flaw in the IS/MND and may be placing the residents of the adjacent structures at risk from the construction phase of the Project.

5. The City's Analysis Appears To Focus Only On Diesel Particulate Matter (DPM) Emissions From The Freeway And Does Not Include A Speciated Analysis Of All TACs From The Freeway

While the primary source of particulate matter from freeways is diesel particulate exhaust, other emissions that will impact students and staff at the Valor Elementary Project Site from freeways include carbon dioxide (CO_2), carbon monoxide (CO), hydrocarbons (HC), nitrogen oxides (NO_X), particulate matter (PM), and substances known as mobile source air toxics (MSATs), such as benzene, formaldehyde, acetaldehyde, 1,3-butadiene, toluene, ethylbenzene, xylenes, and acetaldehyde. Each of these compounds, along with secondary by-products, such as ozone and secondary aerosols (e.g., nitrates and inorganic and organic acids), can cause adverse effects on health and the environment.[6]

Diesel exhaust contains nearly 40 toxic substances, including toxic air contaminants (TACs) and may pose a serious public health risk for residents in the vicinity of the facility. TACs are airborne

[4] City of Los Angeles. 2019. Air Quality and Health Effects Guidance. Pg 6.

[5] City of Los Angeles. 2019. Air Quality and Health Effects Guidance. Pg 9, pg 36.

[6] HEI. 2010. Traffic-Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects. January, 2010.

substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.

Diesel exhaust has been linked to a range of serious health problems including an increase in respiratory disease, lung damage, cancer, and premature death.[7,8,9] Fine DPM is deposited deep in the lungs in the smallest airways and can result in increased respiratory symptoms and disease; decreased lung function, particularly in children and individuals with asthma; alterations in lung tissue and respiratory tract defense mechanisms; and premature death.[10] Exposure to DPM increases the risk of lung cancer. It also causes non-cancer effects including chronic bronchitis, inflammation of lung tissue, thickening of the alveolar walls, immunological allergic reactions, and airway constriction.[11] DPM is a TAC that is recognized by state and federal agencies as causing severe health risk because it contains toxic materials, unlike $PM_{2.5}$ and PM_{10}.[12]

It is evident that the HRA provided as an Appendix to the IS/MND fails to include all of the compounds associated with freeway emissions. The HRA therefore is an underestimate of the impacts that will burden the students, staff, and parents associated with the Project. The City must revise the HRA to include all compounds associated with freeway emissions in its analysis of risk in an EIR.

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[7] California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Staff Report, June 1998; see also California Air Resources Board, Overview: Diesel Exhaust & Health, https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health#:~:text=Diesel%20Particulate%20Matter%20and%20Health&text=In%201998%2C%20CARB%20identified%20DPM,and%20other%20adverse%20health%20effects.

[8] U.S. EPA, Health Assessment Document for Diesel Engine Exhaust, Report EPA/600/8-90/057F, May 2002.

[9] Environmental Defense Fund, Cleaner Diesel Handbook, Bring Cleaner Fuel and Diesel Retrofits into Your Neighborhood, April 2005; http://www.edf.org/documents/4941_cleanerdieselhandbook.pdf, accessed July 5, 2020.

[10] California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Staff Report, June 1998.

[11] Findings of the Scientific Review Panel on The Report on Diesel Exhaust as adopted at the Panel's April 22, 1998 Meeting.

[12] Health & Safety Code § 39655(a) (defining "toxic air contaminant" as air pollutants "which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412 (b)) is a toxic air contaminant.")

6. Using the Same Input Parameters As The AERMOD Model Presented In Appendix B, Produces Exposure Concentrations Approximately 1.5 Times Higher Than In The Model Presented In The HRA

Using the same input parameters listed in AERMOD input file utilized in the Health Risk Analysis for the Project (Appendix B) to the IS/MND, produces concentrations at the Project Site 1.5 times higher than presented in the HRA. The input parameters listed in the Rincon model are presented in an Appendix to this letter.

The 10 highest values from Rincon HRA are included below.

** CONC OF FREEWAY IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
I405N	1ST HIGHEST VALUE IS	5.24079 AT	(364484.65, 3790059.89, 235.00, 235.00, 0.00)	GC	UCART1
	2ND HIGHEST VALUE IS	5.22373 AT	(364484.65, 3790044.89, 235.00, 235.00, 0.00)	GC	UCART1
	3RD HIGHEST VALUE IS	5.20670 AT	(364484.65, 3790029.89, 235.00, 235.00, 0.00)	GC	UCART1
	4TH HIGHEST VALUE IS	5.18954 AT	(364484.65, 3790014.89, 235.00, 235.00, 0.00)	GC	UCART1
	5TH HIGHEST VALUE IS	5.17212 AT	(364484.65, 3789999.89, 235.00, 235.00, 0.00)	GC	UCART1
	6TH HIGHEST VALUE IS	5.15437 AT	(364484.65, 3789984.89, 235.00, 235.00, 0.00)	GC	UCART1
	7TH HIGHEST VALUE IS	5.13617 AT	(364484.65, 3789969.89, 235.00, 235.00, 0.00)	GC	UCART1
	8TH HIGHEST VALUE IS	5.11738 AT	(364484.65, 3789954.89, 235.00, 235.00, 0.00)	GC	UCART1
	9TH HIGHEST VALUE IS	5.09801 AT	(364484.65, 3789939.89, 235.00, 235.00, 0.00)	GC	UCART1
	10TH HIGHEST VALUE IS	5.07809 AT	(364484.65, 3789924.89, 235.00, 235.00, 0.00)	GC	UCART1
I405S	1ST HIGHEST VALUE IS	4.36772 AT	(364484.65, 3790059.89, 235.00, 235.00, 0.00)	GC	UCART1
	2ND HIGHEST VALUE IS	4.35375 AT	(364484.65, 3790044.89, 235.00, 235.00, 0.00)	GC	UCART1
	3RD HIGHEST VALUE IS	4.34002 AT	(364484.65, 3790029.89, 235.00, 235.00, 0.00)	GC	UCART1
	4TH HIGHEST VALUE IS	4.32650 AT	(364484.65, 3790014.89, 235.00, 235.00, 0.00)	GC	UCART1
	5TH HIGHEST VALUE IS	4.31311 AT	(364484.65, 3789999.89, 235.00, 235.00, 0.00)	GC	UCART1
	6TH HIGHEST VALUE IS	4.29985 AT	(364484.65, 3789984.89, 235.00, 235.00, 0.00)	GC	UCART1
	7TH HIGHEST VALUE IS	4.28670 AT	(364484.65, 3789969.89, 235.00, 235.00, 0.00)	GC	UCART1
	8TH HIGHEST VALUE IS	4.27360 AT	(364484.65, 3789954.89, 235.00, 235.00, 0.00)	GC	UCART1
	9TH HIGHEST VALUE IS	4.26055 AT	(364484.65, 3789939.89, 235.00, 235.00, 0.00)	GC	UCART1
	10TH HIGHEST VALUE IS	4.24754 AT	(364484.65, 3789924.89, 235.00, 235.00, 0.00)	GC	UCART1
ALL	1ST HIGHEST VALUE IS	9.60851 AT	(364484.65, 3790059.89, 235.00, 235.00, 0.00)	GC	UCART1
	2ND HIGHEST VALUE IS	9.57748 AT	(364484.65, 3790044.89, 235.00, 235.00, 0.00)	GC	UCART1
	3RD HIGHEST VALUE IS	9.54672 AT	(364484.65, 3790029.89, 235.00, 235.00, 0.00)	GC	UCART1
	4TH HIGHEST VALUE IS	9.51604 AT	(364484.65, 3790014.89, 235.00, 235.00, 0.00)	GC	UCART1
	5TH HIGHEST VALUE IS	9.48523 AT	(364484.65, 3789999.89, 235.00, 235.00, 0.00)	GC	UCART1
	6TH HIGHEST VALUE IS	9.45421 AT	(364484.65, 3789984.89, 235.00, 235.00, 0.00)	GC	UCART1
	7TH HIGHEST VALUE IS	9.42287 AT	(364484.65, 3789969.89, 235.00, 235.00, 0.00)	GC	UCART1
	8TH HIGHEST VALUE IS	9.39098 AT	(364484.65, 3789954.89, 235.00, 235.00, 0.00)	GC	UCART1
	9TH HIGHEST VALUE IS	9.35856 AT	(364484.65, 3789939.89, 235.00, 235.00, 0.00)	GC	UCART1
	10TH HIGHEST VALUE IS	9.32563 AT	(364484.65, 3789924.89, 235.00, 235.00, 0.00)	GC	UCART1

The output for the same model run by my office is presented below.

*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC		RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE	NETWORK GRID-ID
I-405N	1ST HIGHEST VALUE IS	7.62455	AT (	364484.70,	3790059.90,	235.00,	235.00,	0.00)	DC	
	2ND HIGHEST VALUE IS	7.60277	AT (	364484.70,	3790044.90,	235.00,	235.00,	0.00)	DC	
	3RD HIGHEST VALUE IS	7.58077	AT (	364484.70,	3790029.90,	235.00,	235.00,	0.00)	DC	
	4TH HIGHEST VALUE IS	7.55865	AT (	364484.70,	3790014.90,	235.00,	235.00,	0.00)	DC	
	5TH HIGHEST VALUE IS	7.53641	AT (	364484.70,	3789999.90,	235.00,	235.00,	0.00)	DC	
	6TH HIGHEST VALUE IS	7.51356	AT (	364484.70,	3789984.90,	235.00,	235.00,	0.00)	DC	
	7TH HIGHEST VALUE IS	7.48997	AT (	364484.70,	3789969.90,	235.00,	235.00,	0.00)	DC	
	8TH HIGHEST VALUE IS	7.46571	AT (	364484.70,	3789954.90,	235.00,	235.00,	0.00)	DC	
	9TH HIGHEST VALUE IS	7.44045	AT (	364484.70,	3789939.90,	235.00,	235.00,	0.00)	DC	
	10TH HIGHEST VALUE IS	7.41402	AT (	364484.70,	3789924.90,	235.00,	235.00,	0.00)	DC	
I-405S	1ST HIGHEST VALUE IS	6.45367	AT (	364484.70,	3790059.90,	235.00,	235.00,	0.00)	DC	
	2ND HIGHEST VALUE IS	6.43583	AT (	364484.70,	3790044.90,	235.00,	235.00,	0.00)	DC	
	3RD HIGHEST VALUE IS	6.41809	AT (	364484.70,	3790029.90,	235.00,	235.00,	0.00)	DC	
	4TH HIGHEST VALUE IS	6.40054	AT (	364484.70,	3790014.90,	235.00,	235.00,	0.00)	DC	
	5TH HIGHEST VALUE IS	6.38317	AT (	364484.70,	3789999.90,	235.00,	235.00,	0.00)	DC	
	6TH HIGHEST VALUE IS	6.36584	AT (	364484.70,	3789984.90,	235.00,	235.00,	0.00)	DC	
	7TH HIGHEST VALUE IS	6.34857	AT (	364484.70,	3789969.90,	235.00,	235.00,	0.00)	DC	
	8TH HIGHEST VALUE IS	6.33143	AT (	364484.70,	3789954.90,	235.00,	235.00,	0.00)	DC	
	9TH HIGHEST VALUE IS	6.31430	AT (	364484.70,	3789939.90,	235.00,	235.00,	0.00)	DC	
	10TH HIGHEST VALUE IS	6.29715	AT (	364484.70,	3789924.90,	235.00,	235.00,	0.00)	DC	
ALL	1ST HIGHEST VALUE IS	14.07822	AT (	364484.70,	3790059.90,	235.00,	235.00,	0.00)	DC	
	2ND HIGHEST VALUE IS	14.03860	AT (	364484.70,	3790044.90,	235.00,	235.00,	0.00)	DC	
	3RD HIGHEST VALUE IS	13.99887	AT (	364484.70,	3790029.90,	235.00,	235.00,	0.00)	DC	
	4TH HIGHEST VALUE IS	13.95919	AT (	364484.70,	3790014.90,	235.00,	235.00,	0.00)	DC	
	5TH HIGHEST VALUE IS	13.91957	AT (	364484.70,	3789999.90,	235.00,	235.00,	0.00)	DC	
	6TH HIGHEST VALUE IS	13.87940	AT (	364484.70,	3789984.90,	235.00,	235.00,	0.00)	DC	
	7TH HIGHEST VALUE IS	13.83854	AT (	364484.70,	3789969.90,	235.00,	235.00,	0.00)	DC	
	8TH HIGHEST VALUE IS	13.79714	AT (	364484.70,	3789954.90,	235.00,	235.00,	0.00)	DC	
	9TH HIGHEST VALUE IS	13.75475	AT (	364484.70,	3789939.90,	235.00,	235.00,	0.00)	DC	
	10TH HIGHEST VALUE IS	13.71117	AT (	364484.70,	3789924.90,	235.00,	235.00,	0.00)	DC	

Since the results of the model are in doubt based on the re-analysis of the AERMOD run, the City must re-run the model to confirm the model output presented in the HRA.

7. The City's Air Quality Analysis Includes Simplifying Assumptions That Underestimates The Impacts Of Freeway Emissions On The Project Site.

A review of the AERMOD input file utilized in the Health Risk Analysis for the Project (Appendix B) to the IS/MND shows simplifying assumptions made by Rincon Consultants, Inc (Rincon), the Proponent's consultant, that result in underestimations of the freeway exhaust impacts. According to the Executive Summary of Appendix B, The Project entails development of one and two-story, 26.5-foot-tall elementary school building with 28 classrooms for grades transitional kindergarten through fourth. In addition, the Project would construct a multi-purpose room, two play

areas, a kindergarten play area, administrative spaces, corridors and storage spaces, and a surface parking lot with an ingress/egress driveway off Plummer Street.

In Section 3.1.1. Air Dispersion Modeling of Appendix B, Rincon states "Specific meteorology and terrain data from SCAQMD's Van Nuys Airport air monitoring station (of the closest station to the project site) and the United States Geological Survey (USGS) Digital Elevation Model (DEM) data for the Van Nuys and San Fernando Quadrangle were input to the model. The project site base elevation is approximately 264 meters above mean sea level (amsl). I-405 varies in elevation between approximately 256 and 274 meters amsl along the length of the approximately one-mile segment modeled. The dispersion model considers these differences in topography. The I-405 mainline within a half-mile of the project site was modeled as line volume sources in AERMOD. The presence of buildings and other structures disturbs downwind air flow. However, building downwash is only calculated for point sources and is not appropriate to include in AERMOD for this HRA. The plume height was based on an average for light- and heavy-duty vehicles (SBCAPCD 2020)." The model presented in the HRA assumes a flat model domain, eliminating an consideration of the differing elevation between the source of pollution and the receptor. The Applicant fails to describe why the elevation difference was not included in the model.

The source terms utilized in the are based on a model that is generally not utilized to assess existing emissions from roadways. According to Section 3.1.1 Air Dispersion Modeling, "Mobile source TAC emissions associated with vehicle traffic on I-405 were estimated based on the methodology and spreadsheet developed by the UC Davis-Caltrans Air Quality Project, Estimating Mobile Source Air Toxics Emissions [MSAT]: A Step-By-Step Project Analysis Methodology (2006). This spreadsheet was designed to estimate the total amount of the six pollutants of concern discussed in Section 2.2, Toxic Air Contaminants, based on total organic gases emission factors and diesel particulate emission factors from EMFAC2021. The analysis was based on year 2024 composite emission factors. The UC Davis-Caltrans spreadsheet contains speciation factors from the CARB, and the USEPA's Motor Vehicle Emission Simulator (MOVES; USEPA 2016) was used to supplement missing values for acrolein. These emission and speciation factors were then multiplied by traffic volumes for the mainline to obtain total emissions from I-405 within one-half mile of the project site." Since the Applicant has not included the MSAT spreadsheets, the source terms cannot be validated. Additionally, a review of the AERMOD input file shows that for the simulation the Applicant assumed

a standard emission rate of 1 gram of pollutant per sec (g/sec) divided among all of the volume sources assumed present on I-405. The missing components in the analysis presented include the actual assumed emission rate of each COC from each class of vehicle moving along I-405. The resulting analysis is little more than a screening assessment of impacts based on unverifiable data. The City must require a complete analysis of the impacts in an EIR.

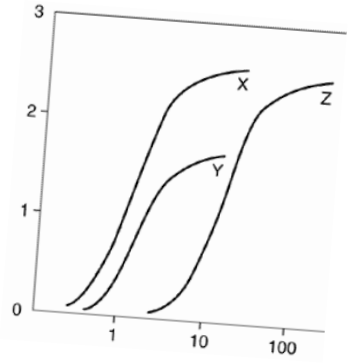
Conclusion

The facts identified and referenced in this comment letter lead me to reasonably conclude that the Project could result in significant unmitigated impacts if the DEIR is approved without significant revision. The City must re-evaluate the significant impacts identified in this letter by requiring the preparation of a revised DEIR.

Sincerely,

EXHIBIT A

CV



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James J. J. Clark, Ph.D.

Principal Toxicologist

Toxicology/Exposure Assessment Modeling

Risk Assessment/Analysis/Dispersion Modeling

Education:

Ph.D., Environmental Health Science, University of California, 1995

M.S., Environmental Health Science, University of California, 1993

B.S., Biophysical and Biochemical Sciences, University of Houston, 1987

Professional Experience:

Dr. Clark is a well-recognized toxicologist, air modeler, and health scientist. He has 30 years of experience in researching the effects of environmental contaminants on human health including environmental fate and transport modeling (SCREEN3, AEROMOD, ISCST3, Johnson-Ettinger Vapor Intrusion Modeling, RESRAD, GENII); exposure assessment modeling (partitioning of contaminants in the environment as well as PBPK modeling); conducting and managing human health risk assessments for regulatory compliance and risk-based clean-up levels; and toxicological and medical literature research.

Significant projects performed by Dr. Clark include the following:

LITIGATION SUPPORT

Case: Pamela Butler Vs. Mallinckrodt, Inc. & Cotter Corporation. Case No.: 4:2018cv01701 United States District Court Eastern District of Missouri Eastern Division

Case: Kenneth Edward Koterba Vs. Mallinckrodt, Inc. & Cotter Corporation. Case No.: 4:2018cv01702 United States District Court Eastern District of Missouri Eastern Division

Case: Anthony Hines Vs. Mallinckrodt, Inc. & Cotter Corporation. Case No.: 4:2018cv01703 United States District Court Eastern District of Missouri Eastern Division

Case: Emery David Walick, III Vs. Mallinckrodt, Inc. & Cotter Corporation. Case No.: 4:2018cv01704 United States District Court Eastern District of Missouri Eastern Division

Client: Humphrey, Farrington & McClain, P.C., Independence, Missouri

Dr. Clark performed a historical dose reconstruction for community members exposed to radioactive waste released into the environment from the St. Louis Air Port Site (SLAPS) and the Hazelwood Interim Storage Site (HISS). The releases resulted in impacts to soils, sediments, surface waters, and groundwater in the vicinity of the SLAPS and HISS sites. The analysis was performed in general accordance with the methods outlined by the Agency for Toxic Substances Control (ATSDR) for assessing radiation doses from historical source areas in North St. Louis County, Missouri.

Case Result: Trial Pending

Case: Don Strong, et al. vs. Republic Services, Inc., Bridgeton Landfill, LLC, vs. Cotter Corporation, N.S.L., Case No.: 17SL-CC01632-01 Circuit Court of St. Louis County, State of Missouri, Division 17

Client: Humphrey, Farrington & McClain, P.C., Independence, Missouri

Dr. Clark performed a historical dose reconstruction for community members from radiologically impacted material (RIM) releases from the adjacent West Lake Landfill. The analysis was performed in general accordance with the methods outlined by the Agency for Toxic Substances Control (ATSDR) for assessing radiation doses from historical source areas in North St. Louis County, Missouri.

Case Result: Settlement in favor of plaintiff.

Case: Arnold Goldstein, Hohn Covas, Gisela Janette La Bella, et al.. vs. Exxon Mobil Corporation, PBF Energy Inc., Torrance Refining Company LLC, et al., Case No.: 2:17-cv-02477DSF United States District Court for the Central District of California

Client: Sher Edlging, LLP, San Francisco, California and Matern Law Group , PC., El Segundo, California

Dr. Clark performed a historical dose reconstruction for community members from an active 700 acre petroleum refinery in Los Angeles. The analysis included a multi-year dispersion model was performed in general accordance with the methods outlined by the U.S. EPA and the SCAQMD for assessing the health impacts in Torrance, California. The results of the analysis are being used as the basis for injunctive relief for the communities surrounding the refinery.

Case Result: Trial Pending

Case: Scott D. McClurg, et al. v. Mallinckrodt Inc. and Cotter Corporation. Lead Case No.: 4:12CV00361 AGF United States District Court Eastern District of Missouri Eastern Division

Client: Environmental Law Group, Birmingham, AL.

Dr. Clark performed a historical dose reconstruction for community members and workers exposed to radioactive waste released into the environment from the St. Louis Air Port Site (SLAPS) and the Hazelwood Interim Storage Site (HISS). The releases resulted in impacts to soils, sediments, surface waters, and groundwater in the vicinity of the SLAPS and HISS sites. The analysis included the incorporation of air dispersion modeling across the community to determine ground-level air concentrations and deposition of thorium and uranium isotopes and their respective daughter products. The dose reconstruction considered all relevant pathways to determine total doses of radiation received across the community from 1946 through 2017.

Case Result: Settlement in favor of plaintiff.

Case: Mary Ann Piccolo V. Headwaters Incorporated, et al. Seventh Judicial Court In and For Carbon County, State of Utah. Case No. 130700053

Client: Law Offices of Roy L. Mason. Annapolis, MD

Dr. Clark performed a dose assessment of an individual occupationally exposed to metals and silica from fly ash who later developed cancer. A review of the individual's medical and occupational history was performed to prepare opinions regarding his exposure and later development of cancer.

Case Result: Settlement in favor of plaintiff.

Case: Tracey Coleman V. Headwaters Incorporated, et al. Seventh Judicial Court In and For Carbon County, State of Utah. Case No. 140902847

Client: Law Offices of Roy L. Mason. Annapolis, MD

Dr. Clark performed a dose assessment of an individual occupationally exposed to metals and silica from fly ash who later developed cancer. A review of the individual's medical and occupational history was performed to prepare opinions regarding his exposure and later development of cancer.

Case Result: Settlement in favor of plaintiff.

Case: David Dominguez and Amanda Dominguez V. Cytec Industries, Inc et al. Superior Court of the State Of California for the County Of Los Angeles – Central Civil West. Civil Action. BC533123

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to hexavalent chromium who later developed cancer. A review of the individual's medical and occupational history was performed to prepare opinions regarding her exposure and later development of cancer.

Case Result: Settlement in favor of plaintiff.

SELECTED AIR MODELING RESEARCH/PROJECTS

Client(s) – Multiple

Indoor Air Evaluations, California: Performed multiple indoor air screening evaluations and risk characterizations consistent with California Environmental Protection Agency's (Cal/EPA) Department of Toxic Substances Control (DTSC) and Regional Water Quality Control Board (RWQCB) methodologies. Characterizations included the use of DTSC's modified Johnson & Ettinger Model and USEPA models, as well as the attenuation factor model currently advocated by Cal/EPA's Office of Environmental Health and Hazard Assessment (OEHHA).

Client – Confidential

Dr. Clark performed a comprehensive evaluation of criteria pollutants, air toxins, and particulate matter emissions from a carbon black production facility to determine the impacts on the surrounding communities. The results of the dispersion model were used to estimate acute and chronic exposure concentrations to multiple contaminants and were be incorporated into a comprehensive risk evaluation.

Client – Confidential

Dr. Clark performed a comprehensive evaluation of air toxins and particulate matter emissions from a railroad tie manufacturing facility to determine the impacts on the surrounding communities. The results of the dispersion model have been used to estimate acute and chronic exposure concentrations to multiple contaminants and have been incorporated into a comprehensive risk evaluation.

EMERGING/PERSISTENT CONTAMINANT RESEARCH/PROJECTS

Client: City of Santa Clarita, Santa Clarita, California

Dr. Clark managed the oversight of the characterization, remediation and development activities of a former 1,000 acre munitions manufacturing facility for the City of Santa Clarita. The site is impacted with a number of contaminants including perchlorate, unexploded ordinance, and volatile organic compounds (VOCs). The site is currently under a number of regulatory consent orders, including an Immanent and Substantial Endangerment Order. Dr. Clark assisted the impacted municipality with the development of remediation strategies, interaction with the responsible parties and stakeholders, as well as interfacing with the regulatory agency responsible for oversight of the site cleanup.

Client – Confidential, Los Angeles, California

Dr. Clark is performing a comprehensive review of the potential for pharmaceuticals and their by-products to impact groundwater and surface water supplies. This evaluation will include a review if available data on the history of pharmaceutical production in the United States; the chemical characteristics of various pharmaceuticals; environmental fate and transport; uptake by xenobiotics; the potential effects of pharmaceuticals on water treatment systems; and the potential threat to public health. The results of the evaluation may be used as a briefing tool for non-public health professionals.

PUBLIC HEALTH/TOXICOLOGY

Client: Brayton Purcell, Novato, California

Dr. Clark performed a toxicological assessment of residents exposed to methyl-tertiary butyl ether (MTBE) from leaking underground storage tanks (LUSTs) adjacent to the subject property. The symptomology of residents and guests of the subject property were evaluated against the known outcomes in published literature to exposure to MTBE. The study found that residents had been exposed to MTBE in their drinking water; that concentrations of MTBE detected at the site were above regulatory guidelines; and, that the symptoms and outcomes expressed by residents and guests were consistent with symptoms and outcomes documented in published literature.

Client: Covanta Energy, Westwood, California

Evaluated health risk from metals in biosolids applied as soil amendment on agricultural lands. The biosolids were created at a forest waste cogeneration facility using 96% whole tree wood chips and 4 percent green waste. Mass loading calculations were used to estimate Cr(VI) concentrations in agricultural soils based on a maximum loading rate of 40 tons of biomass per acre of agricultural soil. The results of the study were used by the Regulatory agency to determine that the application of biosolids did not constitute a health risk to workers applying the biosolids or to residences near the agricultural lands.

Client: Kaiser Venture Incorporated, Fontana, California

Prepared PBPK assessment of lead risk of receptors at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

RISK ASSESSMENTS/REMEDIAL INVESTIGATIONS

Kaiser Ventures Incorporated, Fontana, California

Prepared health risk assessment of semi-volatile organic chemicals and metals for a fifty-year old wastewater treatment facility used at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

ANR Freight - Los Angeles, California

Prepared a comprehensive Preliminary Endangerment Assessment (PEA) of petroleum hydrocarbon and metal contamination of a former freight depot. This evaluation was as the basis for reaching closure of the site with lead regulatory agency.

Kaiser Ventures Incorporated, Fontana, California

Prepared comprehensive health risk assessment of semi-volatile organic chemicals and metals for 23-acre parcel of a 1,100-acre former steel mill. The health risk assessment was used to determine clean up goals and as the basis for granting closure of the site by lead regulatory agency. Air dispersion modeling using ISCST3 was performed to determine downwind exposure point concentrations at sensitive receptors within a 1 kilometer radius of the site. The results of the health risk assessment were presented at a public meeting sponsored by the Department of Toxic Substances Control (DTSC) in the community potentially affected by the site.

Unocal Corporation - Los Angeles, California

Prepared comprehensive assessment of petroleum hydrocarbons and metals for a former petroleum service station located next to sensitive population center (elementary school). The assessment used a probabilistic approach to estimate risks to the community and was used as the basis for granting closure of the site by lead regulatory agency.

Client: Confidential, Los Angeles, California

Managed oversight of remedial investigation most contaminated heavy metal site in California. Lead concentrations in soil excess of 68,000,000 parts per billion (ppb) have been measured at the site. This State Superfund Site was a former hard chrome plating operation that operated for approximately 40-years.

Client: Confidential, San Francisco, California

Coordinator of regional monitoring program to determine background concentrations of metals in air. Acted as liaison with SCAQMD and CARB to perform co-location sampling and comparison of accepted regulatory method with ASTM methodology.

Client: Confidential, San Francisco, California

Analyzed historical air monitoring data for South Coast Air Basin in Southern California and potential health risks related to ambient concentrations of carcinogenic metals and volatile organic compounds. Identified and reviewed the available literature and calculated risks from toxins in South Coast Air Basin.

IT Corporation, North Carolina

Prepared comprehensive evaluation of potential exposure of workers to air-borne VOCs at hazardous waste storage facility under SUPERFUND cleanup decree. Assessment used in developing health based clean-up levels.

Professional Associations

American Public Health Association (APHA)
Association for Environmental Health and Sciences (AEHS)
American Chemical Society (ACS)
International Society of Environmental Forensics (ISEF)
Society of Environmental Toxicology and Chemistry (SETAC)

Publications and Presentations:

Books and Book Chapters

Sullivan, P., **J.J. J. Clark,** F.J. Agardy, and P.E. Rosenfeld. (2007). *Synthetic Toxins In The Food, Water and Air of American Cities*. Elsevier, Inc. Burlington, MA.

Sullivan, P. and **J.J. J. Clark**. 2006. *Choosing Safer Foods, A Guide To Minimizing Synthetic Chemicals In Your Diet*. Elsevier, Inc. Burlington, MA.

Sullivan, P., Agardy, F.J., and **J.J.J. Clark**. 2005. *The Environmental Science of Drinking Water*. Elsevier, Inc. Burlington, MA.

Sullivan, P.J., Agardy, F.J., **Clark, J.J.J.** 2002. *America's Threatened Drinking Water: Hazards and Solutions*. Trafford Publishing, Victoria B.C.

Clark, J.J.J. 2001. "TBA: Chemical Properties, Production & Use, Fate and Transport, Toxicology, Detection in Groundwater, and Regulatory Standards" in *Oxygenates in the Environment.* Art Diaz, Ed.. Oxford University Press: New York.

Clark, J.J.J. 2000. "Toxicology of Perchlorate" in *Perchlorate in the Environment.* Edward Urbansky, Ed. Kluwer/Plenum: New York.

Clark, J.J.J. 1995. Probabilistic Forecasting of Volatile Organic Compound Concentrations At The Soil Surface From Contaminated Groundwater. UMI.

Baker, J.; **Clark, J.J.J.**; Stanford, J.T. 1994. Ex Situ Remediation of Diesel Contaminated Railroad Sand by Soil Washing. Principles and Practices for Diesel Contaminated Soils, Volume III. P.T. Kostecki, E.J. Calabrese, and C.P.L. Barkan, eds. Amherst Scientific Publishers, Amherst, MA. pp 89-96.

Journal and Proceeding Articles

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equialency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. Organohalogen Compounds, Volume 70 (2008) page 002254.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. Organohalogen Compounds, Volume 70 (2008) page 000527

Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** (2007). "Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." *Environmental Research.* 105:194-199.

Rosenfeld, P.E., **Clark, J. J.,** Hensley, A.R., and Suffet, I.H. 2007. "The Use Of An Odor Wheel Classification For The Evaluation of Human Health Risk Criteria For Compost Facilities" Water Science & Technology. 55(5): 345-357.

Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** 2006. "Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006, August 21 – 25, 2006. Radisson SAS Scandinavia Hotel in Oslo Norway.

Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2005. "The Value Of An Odor Quality Classification Scheme For Compost Facility Evaluations" The U.S. Composting Council's 13th Annual Conference January 23 - 26, 2005, Crowne Plaza Riverwalk, San Antonio, TX.

Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2004. "The Value Of An Odor Quality Classification Scheme For Urban Odor" WEFTEC 2004. 77th Annual Technical Exhibition & Conference October 2 - 6, 2004, Ernest N. Morial Convention Center, New Orleans, Louisiana.

Clark, J.J.J. 2003. "Manufacturing, Use, Regulation, and Occurrence of a Known Endocrine Disrupting Chemical (EDC), 2,4-Dichlorophnoxyacetic Acid (2,4-D) in California Drinking Water Supplies." National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Minneapolis, MN. March 20, 2003.

Rosenfeld, P. and **J.J.J. Clark**. 2003. "Understanding Historical Use, Chemical Properties, Toxicity, and Regulatory Guidance" National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Phoenix, AZ. February 21, 2003.

Clark, J.J.J., Brown A. 1999. Perchlorate Contamination: Fate in the Environment and Treatment Options. In Situ and On-Site Bioremediation, Fifth International Symposium. San Diego, CA, April, 1999.

Clark, J.J.J. 1998. Health Effects of Perchlorate and the New Reference Dose (RfD). Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.

Browne, T., **Clark, J.J.J.** 1998. Treatment Options For Perchlorate In Drinking Water. Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.

Clark, J.J.J., Brown, A., Rodriguez, R. 1998. The Public Health Implications of MtBE and Perchlorate in Water: Risk Management Decisions for Water Purveyors. Proceedings of the National Ground Water Association, Anaheim, CA, June 3-4, 1998.

Clark J.J.J., Brown, A., Ulrey, A. 1997. Impacts of Perchlorate On Drinking Water In The Western United States. U.S. EPA Symposium on Biological and Chemical Reduction of Chlorate and Perchlorate, Cincinnati, OH, December 5, 1997.

Clark, J.J.J.; Corbett, G.E.; Kerger, B.D.; Finley, B.L.; Paustenbach, D.J. 1996. Dermal Uptake of Hexavalent Chromium In Human Volunteers: Measures of Systemic Uptake From Immersion in Water At 22 PPM. Toxicologist. 30(1):14.

Dodge, D.G.; **Clark, J.J.J.**; Kerger, B.D.; Richter, R.O.; Finley, B.L.; Paustenbach, D.J. 1996. Assessment of Airborne Hexavalent Chromium In The Home Following Use of Contaminated Tapwater. Toxicologist. 30(1):117-118.

Paulo, M.T.; Gong, H., Jr.; **Clark, J.J.J.** (1992). Effects of Pretreatment with Ipratroprium Bromide in COPD Patients Exposed to Ozone. American Review of Respiratory Disease. 145(4):A96.

Harber, P.H.; Gong, H., Jr.; Lachenbruch, A.; **Clark, J.**; Hsu, P. (1992). Respiratory Pattern Effect of Acute Sulfur Dioxide Exposure in Asthmatics. American Review of Respiratory Disease. 145(4):A88.

McManus, M.S.; Gong, H., Jr.; Clements, P.; **Clark, J.J.J.** (1991). Respiratory Response of Patients With Interstitial Lung Disease To Inhaled Ozone. American Review of Respiratory Disease. 143(4):A91.

Gong, H., Jr.; Simmons, M.S.; McManus, M.S.; Tashkin, D.P.; Clark, V.A.; Detels, R.; **Clark, J.J.** (1990). Relationship Between Responses to Chronic Oxidant and Acute

Ozone Exposures in Residents of Los Angeles County. American Review of Respiratory Disease. 141(4):A70.

Tierney, D.F. and **J.J.J. Clark.** (1990). Lung Polyamine Content Can Be Increased By Spermidine Infusions Into Hyperoxic Rats. American Review of Respiratory Disease. 139(4):A41.

EXHIBIT B

AERMOD Model Of I-405 Emissions

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** BREEZE AERMOD
** Trinity Consultants
** VERSION  11.0

CO STARTING
CO TITLEONE  Valor Elementary Exposure To DPM From I-405
CO MODELOPT  CONC  FLAT  NODRYDPLT  NOWETDPLT  NOURBTRAN
CO RUNORNOT  RUN
CO AVERTIME  PERIOD
CO POLLUTID  DPM
CO FINISHED

SO STARTING
SO ELEVUNIT  METERS
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SO SRCPARAM  405N0741  0.02381  1.43  22.83  1.33
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      7.2  7.2  7.2  7.2
268   SO EMISFACT  405N0726  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
269   SO EMISFACT  405N0726  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
270   SO EMISFACT  405N0726  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
271   SO EMISFACT  405N0726  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
272   SO EMISFACT  405N0727  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
273   SO EMISFACT  405N0727  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
274   SO EMISFACT  405N0727  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
275   SO EMISFACT  405N0727  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
276   SO EMISFACT  405N0727  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
277   SO EMISFACT  405N0728  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
278   SO EMISFACT  405N0728  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
279   SO EMISFACT  405N0728  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
280   SO EMISFACT  405N0728  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
281   SO EMISFACT  405N0728  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
282   SO EMISFACT  405N0729  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
283   SO EMISFACT  405N0729  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
284   SO EMISFACT  405N0729  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
285   SO EMISFACT  405N0729  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
286   SO EMISFACT  405N0729  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
287   SO EMISFACT  405N0730  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
288   SO EMISFACT  405N0730  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
289   SO EMISFACT  405N0730  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
290   SO EMISFACT  405N0730  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
291   SO EMISFACT  405N0730  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
292   SO EMISFACT  405N0731  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
293   SO EMISFACT  405N0731  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
294   SO EMISFACT  405N0731  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
295   SO EMISFACT  405N0731  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
296   SO EMISFACT  405N0731  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
297   SO EMISFACT  405N0732  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
298   SO EMISFACT  405N0732  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
299   SO EMISFACT  405N0732  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
300   SO EMISFACT  405N0732  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
301   SO EMISFACT  405N0732  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
302   SO EMISFACT  405N0733  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
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      7.2  7.2  7.2  7.2
303   SO EMISFACT  405N0733  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
304   SO EMISFACT  405N0733  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
305   SO EMISFACT  405N0733  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
306   SO EMISFACT  405N0733  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
307   SO EMISFACT  405N0734  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
308   SO EMISFACT  405N0734  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
309   SO EMISFACT  405N0734  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
310   SO EMISFACT  405N0734  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
311   SO EMISFACT  405N0734  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
312   SO EMISFACT  405N0735  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
313   SO EMISFACT  405N0735  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
314   SO EMISFACT  405N0735  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
315   SO EMISFACT  405N0735  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
316   SO EMISFACT  405N0735  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
317   SO EMISFACT  405N0736  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
318   SO EMISFACT  405N0736  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
319   SO EMISFACT  405N0736  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
320   SO EMISFACT  405N0736  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
321   SO EMISFACT  405N0736  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
322   SO EMISFACT  405N0737  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
323   SO EMISFACT  405N0737  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
324   SO EMISFACT  405N0737  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
325   SO EMISFACT  405N0737  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
326   SO EMISFACT  405N0737  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
327   SO EMISFACT  405N0738  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
328   SO EMISFACT  405N0738  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
329   SO EMISFACT  405N0738  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
330   SO EMISFACT  405N0738  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
331   SO EMISFACT  405N0738  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
332   SO EMISFACT  405N0739  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
333   SO EMISFACT  405N0739  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
334   SO EMISFACT  405N0739  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
335   SO EMISFACT  405N0739  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
336   SO EMISFACT  405N0739  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
337   SO EMISFACT  405N0740  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
338   SO EMISFACT  405N0740  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
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339   SO EMISFACT  405N0740  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
340   SO EMISFACT  405N0740  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
341   SO EMISFACT  405N0740  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
342   SO EMISFACT  405N0741  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
343   SO EMISFACT  405N0741  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
344   SO EMISFACT  405N0741  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
345   SO EMISFACT  405N0741  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
346   SO EMISFACT  405N0741  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
347   SO EMISFACT  405N0742  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
348   SO EMISFACT  405N0742  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
349   SO EMISFACT  405N0742  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
350   SO EMISFACT  405N0742  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
351   SO EMISFACT  405N0742  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
352   SO EMISFACT  405N0743  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
353   SO EMISFACT  405N0743  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
354   SO EMISFACT  405N0743  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
355   SO EMISFACT  405N0743  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
356   SO EMISFACT  405N0743  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
357   SO EMISFACT  405N0744  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
358   SO EMISFACT  405N0744  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
359   SO EMISFACT  405N0744  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
360   SO EMISFACT  405N0744  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
361   SO EMISFACT  405N0744  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
362   SO EMISFACT  405N0745  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
363   SO EMISFACT  405N0745  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
364   SO EMISFACT  405N0745  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
365   SO EMISFACT  405N0745  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
366   SO EMISFACT  405N0745  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
367   SO EMISFACT  405N0746  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
368   SO EMISFACT  405N0746  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
369   SO EMISFACT  405N0746  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
370   SO EMISFACT  405N0746  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
371   SO EMISFACT  405N0746  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
372   SO EMISFACT  405N0747  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
373   SO EMISFACT  405N0747  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
374   SO EMISFACT  405N0747  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
375   SO EMISFACT  405N0747  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
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      0.0  0.0  0.0  0.0
376   SO EMISFACT  405N0747  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
377   SO EMISFACT  405N0748  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
378   SO EMISFACT  405N0748  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
379   SO EMISFACT  405N0748  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
380   SO EMISFACT  405N0748  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
381   SO EMISFACT  405N0748  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
382   SO EMISFACT  405N0749  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
383   SO EMISFACT  405N0749  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
384   SO EMISFACT  405N0749  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
385   SO EMISFACT  405N0749  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
386   SO EMISFACT  405N0749  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
387   SO EMISFACT  405N0750  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
388   SO EMISFACT  405N0750  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
389   SO EMISFACT  405N0750  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
390   SO EMISFACT  405N0750  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
391   SO EMISFACT  405N0750  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
392   SO EMISFACT  405N0751  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
393   SO EMISFACT  405N0751  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
394   SO EMISFACT  405N0751  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
395   SO EMISFACT  405N0751  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
396   SO EMISFACT  405N0751  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
397   SO EMISFACT  405N0752  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
398   SO EMISFACT  405N0752  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
399   SO EMISFACT  405N0752  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
400   SO EMISFACT  405N0752  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
401   SO EMISFACT  405N0752  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
402   SO EMISFACT  405N0753  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
403   SO EMISFACT  405N0753  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
404   SO EMISFACT  405N0753  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
405   SO EMISFACT  405N0753  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
406   SO EMISFACT  405N0753  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
407   SO EMISFACT  405N0754  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
408   SO EMISFACT  405N0754  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
409   SO EMISFACT  405N0754  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
410   SO EMISFACT  405N0754  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
411   SO EMISFACT  405N0754  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
412   SO EMISFACT  405N0755  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
```

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      7.2  7.2  7.2  7.2
413   SO EMISFACT  405N0755  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
414   SO EMISFACT  405N0755  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
415   SO EMISFACT  405N0755  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
416   SO EMISFACT  405N0755  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
417   SO EMISFACT  405N0756  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
418   SO EMISFACT  405N0756  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
419   SO EMISFACT  405N0756  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
420   SO EMISFACT  405N0756  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
421   SO EMISFACT  405N0756  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
422   SO EMISFACT  405N0757  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
423   SO EMISFACT  405N0757  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
424   SO EMISFACT  405N0757  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
425   SO EMISFACT  405N0757  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
426   SO EMISFACT  405N0757  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
427   SO EMISFACT  405N0758  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
428   SO EMISFACT  405N0758  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
429   SO EMISFACT  405N0758  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
430   SO EMISFACT  405N0758  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
431   SO EMISFACT  405N0758  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
432   SO EMISFACT  405N0759  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
433   SO EMISFACT  405N0759  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
434   SO EMISFACT  405N0759  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
435   SO EMISFACT  405N0759  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
436   SO EMISFACT  405N0759  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
437   SO EMISFACT  405N0760  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
438   SO EMISFACT  405N0760  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
439   SO EMISFACT  405N0760  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
440   SO EMISFACT  405N0760  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
441   SO EMISFACT  405N0760  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
442   SO EMISFACT  405N0761  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
443   SO EMISFACT  405N0761  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
444   SO EMISFACT  405N0761  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
445   SO EMISFACT  405N0761  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
446   SO EMISFACT  405N0761  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
447   SO EMISFACT  405N0762  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
448   SO EMISFACT  405N0762  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
```

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449   SO EMISFACT  405N0762  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
450   SO EMISFACT  405N0762  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
451   SO EMISFACT  405N0762  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
452   SO EMISFACT  405N0763  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
453   SO EMISFACT  405N0763  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
454   SO EMISFACT  405N0763  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
455   SO EMISFACT  405N0763  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
456   SO EMISFACT  405N0763  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
457   SO EMISFACT  405N0764  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
458   SO EMISFACT  405N0764  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
459   SO EMISFACT  405N0764  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
460   SO EMISFACT  405N0764  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
461   SO EMISFACT  405N0764  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
462   SO EMISFACT  405N0765  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
463   SO EMISFACT  405N0765  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
464   SO EMISFACT  405N0765  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
465   SO EMISFACT  405N0765  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
466   SO EMISFACT  405N0765  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
467   SO EMISFACT  405N0766  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
468   SO EMISFACT  405N0766  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
469   SO EMISFACT  405N0766  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
470   SO EMISFACT  405N0766  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
471   SO EMISFACT  405N0766  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
472   SO EMISFACT  405N0767  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
473   SO EMISFACT  405N0767  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
474   SO EMISFACT  405N0767  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
475   SO EMISFACT  405N0767  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
476   SO EMISFACT  405N0767  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
477   SO EMISFACT  405S0676  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
478   SO EMISFACT  405S0676  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
479   SO EMISFACT  405S0676  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
480   SO EMISFACT  405S0676  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
481   SO EMISFACT  405S0676  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
482   SO EMISFACT  405S0677  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
483   SO EMISFACT  405S0677  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
484   SO EMISFACT  405S0677  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
485   SO EMISFACT  405S0677  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
```

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      0.0  0.0  0.0  0.0
486   SO EMISFACT  405S0677  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
487   SO EMISFACT  405S0678  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
488   SO EMISFACT  405S0678  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
489   SO EMISFACT  405S0678  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
490   SO EMISFACT  405S0678  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
491   SO EMISFACT  405S0678  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
492   SO EMISFACT  405S0679  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
493   SO EMISFACT  405S0679  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
494   SO EMISFACT  405S0679  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
495   SO EMISFACT  405S0679  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
496   SO EMISFACT  405S0679  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
497   SO EMISFACT  405S0680  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
498   SO EMISFACT  405S0680  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
499   SO EMISFACT  405S0680  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
500   SO EMISFACT  405S0680  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
501   SO EMISFACT  405S0680  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
502   SO EMISFACT  405S0681  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
503   SO EMISFACT  405S0681  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
504   SO EMISFACT  405S0681  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
505   SO EMISFACT  405S0681  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
506   SO EMISFACT  405S0681  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
507   SO EMISFACT  405S0682  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
508   SO EMISFACT  405S0682  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
509   SO EMISFACT  405S0682  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
510   SO EMISFACT  405S0682  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
511   SO EMISFACT  405S0682  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
512   SO EMISFACT  405S0683  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
513   SO EMISFACT  405S0683  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
514   SO EMISFACT  405S0683  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
515   SO EMISFACT  405S0683  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
516   SO EMISFACT  405S0683  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
517   SO EMISFACT  405S0684  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
518   SO EMISFACT  405S0684  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
519   SO EMISFACT  405S0684  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
520   SO EMISFACT  405S0684  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
521   SO EMISFACT  405S0684  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
522   SO EMISFACT  405S0685  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
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      7.2  7.2  7.2  7.2
523   SO EMISFACT  405S0685  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
524   SO EMISFACT  405S0685  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
525   SO EMISFACT  405S0685  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
526   SO EMISFACT  405S0685  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
527   SO EMISFACT  405S0686  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
528   SO EMISFACT  405S0686  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
529   SO EMISFACT  405S0686  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
530   SO EMISFACT  405S0686  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
531   SO EMISFACT  405S0686  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
532   SO EMISFACT  405S0687  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
533   SO EMISFACT  405S0687  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
534   SO EMISFACT  405S0687  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
535   SO EMISFACT  405S0687  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
536   SO EMISFACT  405S0687  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
537   SO EMISFACT  405S0688  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
538   SO EMISFACT  405S0688  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
539   SO EMISFACT  405S0688  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
540   SO EMISFACT  405S0688  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
541   SO EMISFACT  405S0688  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
542   SO EMISFACT  405S0689  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
543   SO EMISFACT  405S0689  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
544   SO EMISFACT  405S0689  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
545   SO EMISFACT  405S0689  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
546   SO EMISFACT  405S0689  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
547   SO EMISFACT  405S0690  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
548   SO EMISFACT  405S0690  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
549   SO EMISFACT  405S0690  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
550   SO EMISFACT  405S0690  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
551   SO EMISFACT  405S0690  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
552   SO EMISFACT  405S0691  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
553   SO EMISFACT  405S0691  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
554   SO EMISFACT  405S0691  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
555   SO EMISFACT  405S0691  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
556   SO EMISFACT  405S0691  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
557   SO EMISFACT  405S0692  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
558   SO EMISFACT  405S0692  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
```

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559   SO EMISFACT  405S0692  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
560   SO EMISFACT  405S0692  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
561   SO EMISFACT  405S0692  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
562   SO EMISFACT  405S0693  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
563   SO EMISFACT  405S0693  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
564   SO EMISFACT  405S0693  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
565   SO EMISFACT  405S0693  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
566   SO EMISFACT  405S0693  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
567   SO EMISFACT  405S0694  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
568   SO EMISFACT  405S0694  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
569   SO EMISFACT  405S0694  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
570   SO EMISFACT  405S0694  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
571   SO EMISFACT  405S0694  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
572   SO EMISFACT  405S0695  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
573   SO EMISFACT  405S0695  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
574   SO EMISFACT  405S0695  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
575   SO EMISFACT  405S0695  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
576   SO EMISFACT  405S0695  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
577   SO EMISFACT  405S0696  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
578   SO EMISFACT  405S0696  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
579   SO EMISFACT  405S0696  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
580   SO EMISFACT  405S0696  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
581   SO EMISFACT  405S0696  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
582   SO EMISFACT  405S0697  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
583   SO EMISFACT  405S0697  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
584   SO EMISFACT  405S0697  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
585   SO EMISFACT  405S0697  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
586   SO EMISFACT  405S0697  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
587   SO EMISFACT  405S0698  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
588   SO EMISFACT  405S0698  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
589   SO EMISFACT  405S0698  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
590   SO EMISFACT  405S0698  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
591   SO EMISFACT  405S0698  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
592   SO EMISFACT  405S0699  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
593   SO EMISFACT  405S0699  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
594   SO EMISFACT  405S0699  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
595   SO EMISFACT  405S0699  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
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      0.0  0.0  0.0  0.0
596   SO EMISFACT  405S0699  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
597   SO EMISFACT  405S0700  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
598   SO EMISFACT  405S0700  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
599   SO EMISFACT  405S0700  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
600   SO EMISFACT  405S0700  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
601   SO EMISFACT  405S0700  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
602   SO EMISFACT  405S0701  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
603   SO EMISFACT  405S0701  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
604   SO EMISFACT  405S0701  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
605   SO EMISFACT  405S0701  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
606   SO EMISFACT  405S0701  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
607   SO EMISFACT  405S0702  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
608   SO EMISFACT  405S0702  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
609   SO EMISFACT  405S0702  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
610   SO EMISFACT  405S0702  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
611   SO EMISFACT  405S0702  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
612   SO EMISFACT  405S0703  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
613   SO EMISFACT  405S0703  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
614   SO EMISFACT  405S0703  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
615   SO EMISFACT  405S0703  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
616   SO EMISFACT  405S0703  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
617   SO EMISFACT  405S0704  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
618   SO EMISFACT  405S0704  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
619   SO EMISFACT  405S0704  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
620   SO EMISFACT  405S0704  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
621   SO EMISFACT  405S0704  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
622   SO EMISFACT  405S0705  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
623   SO EMISFACT  405S0705  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
624   SO EMISFACT  405S0705  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
625   SO EMISFACT  405S0705  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
626   SO EMISFACT  405S0705  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
627   SO EMISFACT  405S0706  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
628   SO EMISFACT  405S0706  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
629   SO EMISFACT  405S0706  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
630   SO EMISFACT  405S0706  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
631   SO EMISFACT  405S0706  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
632   SO EMISFACT  405S0707  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
```

```
      7.2  7.2  7.2  7.2
633   SO EMISFACT  405S0707  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
634   SO EMISFACT  405S0707  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
635   SO EMISFACT  405S0707  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
636   SO EMISFACT  405S0707  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
637   SO EMISFACT  405S0708  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
638   SO EMISFACT  405S0708  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
639   SO EMISFACT  405S0708  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
640   SO EMISFACT  405S0708  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
641   SO EMISFACT  405S0708  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
642   SO EMISFACT  405S0709  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
643   SO EMISFACT  405S0709  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
644   SO EMISFACT  405S0709  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
645   SO EMISFACT  405S0709  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
646   SO EMISFACT  405S0709  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
647   SO EMISFACT  405S0710  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
648   SO EMISFACT  405S0710  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
649   SO EMISFACT  405S0710  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
650   SO EMISFACT  405S0710  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
651   SO EMISFACT  405S0710  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
652   SO EMISFACT  405S0711  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
653   SO EMISFACT  405S0711  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
654   SO EMISFACT  405S0711  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
655   SO EMISFACT  405S0711  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
656   SO EMISFACT  405S0711  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
657   SO EMISFACT  405S0712  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
658   SO EMISFACT  405S0712  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
659   SO EMISFACT  405S0712  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
660   SO EMISFACT  405S0712  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
661   SO EMISFACT  405S0712  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
662   SO EMISFACT  405S0713  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
663   SO EMISFACT  405S0713  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
664   SO EMISFACT  405S0713  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
665   SO EMISFACT  405S0713  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
666   SO EMISFACT  405S0713  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
667   SO EMISFACT  405S0714  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
668   SO EMISFACT  405S0714  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
```

```
669  SO EMISFACT  405S0714  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
670  SO EMISFACT  405S0714  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
671  SO EMISFACT  405S0714  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
672  SO EMISFACT  405S0715  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
     7.2  7.2  7.2  7.2
673  SO EMISFACT  405S0715  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
674  SO EMISFACT  405S0715  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
675  SO EMISFACT  405S0715  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
676  SO EMISFACT  405S0715  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
677  SO EMISFACT  405S0716  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
     7.2  7.2  7.2  7.2
678  SO EMISFACT  405S0716  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
679  SO EMISFACT  405S0716  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
680  SO EMISFACT  405S0716  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
681  SO EMISFACT  405S0716  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
682  SO EMISFACT  405S0717  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
     7.2  7.2  7.2  7.2
683  SO EMISFACT  405S0717  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
684  SO EMISFACT  405S0717  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
685  SO EMISFACT  405S0717  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
686  SO EMISFACT  405S0717  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
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     405N0732  405N0733
688  SO SRCGROUP  I-405N  405N0734  405N0735  405N0736  405N0737  405N0738  405N0739
     405N0740  405N0741
689  SO SRCGROUP  I-405N  405N0742  405N0743  405N0744  405N0745  405N0746  405N0747
     405N0748  405N0749
690  SO SRCGROUP  I-405N  405N0750  405N0751  405N0752  405N0753  405N0754  405N0755
     405N0756  405N0757
691  SO SRCGROUP  I-405N  405N0758  405N0759  405N0760  405N0761  405N0762  405N0763
     405N0764  405N0765
692  SO SRCGROUP  I-405N  405N0766  405N0767
693  SO SRCGROUP  I-405S  405S0676  405S0677  405S0678  405S0679  405S0680  405S0681
     405S0682  405S0683
694  SO SRCGROUP  I-405S  405S0684  405S0685  405S0686  405S0687  405S0688  405S0689
     405S0690  405S0691
695  SO SRCGROUP  I-405S  405S0692  405S0693  405S0694  405S0695  405S0696  405S0697
     405S0698  405S0699
696  SO SRCGROUP  I-405S  405S0700  405S0701  405S0702  405S0703  405S0704  405S0705
     405S0706  405S0707
697  SO SRCGROUP  I-405S  405S0708  405S0709  405S0710  405S0711  405S0712  405S0713
     405S0714  405S0715
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RE FINISHED

ME STARTING
ME SURFFILE  "C:\Users\jclar\OneDrive\CLARKA~1\PR3138~1\KVNY_V~1\KVNY_V9.SFC"
** SURFFILE  "C:\Users\jclar\OneDrive\CLARKA~1\PR3138~1\KVNY_V~1\KVNY_V9.SFC"
ME PROFFILE  "C:\Users\jclar\OneDrive\CLARKA~1\PR3138~1\KVNY_V~1\KVNY_V9.PFL"
** PROFFILE  "C:\Users\jclar\OneDrive\CLARKA~1\PR3138~1\KVNY_V~1\KVNY_V9.PFL"
ME SURFDATA  23130 2012
ME UAIRDATA  3190 2012
ME PROFBASE  235  METERS
ME FINISHED

OU STARTING
OU FILEFORM  FIX
OU PLOTFILE  PERIOD  I-405N  I-405N`PERIOD.plt  10000
OU PLOTFILE  PERIOD  I-405S  I-405S`PERIOD.plt  10001
OU PLOTFILE  PERIOD  ALL  ALL`PERIOD.plt  10002
OU POSTFILE  PERIOD  I-405N  UNFORM  I-405N`PERIOD.bin  10003
OU POSTFILE  PERIOD  I-405S  UNFORM  I-405S`PERIOD.bin  10004
OU POSTFILE  PERIOD  ALL  UNFORM  ALL`PERIOD.bin  10005
OU FINISHED

** ************************************************************************
** It is recommended that the user not edit any data below this line
** ************************************************************************

** BUILDING BLD  0  0  264.52  7.9248  14
** BUILDING IDN  1BMRZ1EH
** BUILDING CRN  364543.1  3790038.5
** BUILDING CRN  364519.4  3790038.8
** BUILDING CRN  364517.8  3789964.4
** BUILDING CRN  364535.8  3789965
** BUILDING CRN  364536.5  3790009
** BUILDING CRN  364545.3  3790009.4
** BUILDING CRN  364546  3790017.3
** BUILDING CRN  364543.1  3790018.2
** BUILDING CRN  364543.1  3790027.7
** BUILDING CRN  364561.8  3790026.5
** BUILDING CRN  364562.8  3789988.5
** BUILDING CRN  364576.4  3789988.5
** BUILDING CRN  364576.7  3790038.8
** BUILDING CRN  364543.1  3790038.5
** BUILDING BLD  0  0  263.70  7.9248  7
** BUILDING IDN  1BMRZ1EI
** BUILDING CRN  364542.5  3789976.4
** BUILDING CRN  364542.2  3789964.1
** BUILDING CRN  364568.8  3789964.1
** BUILDING CRN  364567.5  3789976.7
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** BUILDING CRN  364568.1  3789976.7
** BUILDING CRN  364568.5  3789976.7
** BUILDING CRN  364542.5  3789976.4

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** TAG CRD       364451.3,3789927.6,0
** TAG NAM  9FIOJ02T
** TAG PRM  0  1  F  F  1  255,0,255,0
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3776870.5
** TERRFILE  C:\USERS\JCLAR\ONEDRIVE\CLARKA~1\PR7D71~1\AERMOD\SAN_FERNANDO30M.DEM  0  2
WGS84  11  30  361809.2  3790894.5  362013.8  3804756.3  373507.9  3804593.4  373320.3
3790731.9
** AMPTYPE  DEM
** AMPDATUM  2
** AMPZONE  11
** AMPHEMISPHERE  N

** PROJECTIONWKT
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,0.0174532925199433]],PROJECTION["Universal_Transverse_Mercator"],PARAMETER["Zone",11],UN
IT["Meter",1,AUTHORITY["EPSG","9001"]]]
** PROJECTION  UTM
** DATUM  WGE
** UNITS  METER
** ZONE  11
** HEMISPHERE  N
** ORIGINLON  0
** ORIGINLAT  0
** PARALLEL1  0
** PARALLEL2  0
** AZIMUTH  0
** SCALEFACT  0
** FALSEEAST  0
** FALSENORTH  0

** POSTFMT  UNFORM
** TEMPLATE USERDEFINED
** AERMODEXE  AERMOD_EPA_22112_64.EXE
** AERMAPEXE  AERMAP_EPA_18081_64.EXE
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** BREEZE AERMOD
** Trinity Consultants
** VERSION  11.0

CO STARTING
CO TITLEONE  Valor Elementary Exposure To DPM From I-405
CO MODELOPT  CONC  FLAT  NODRYDPLT  NOWETDPLT  NOURBTRAN
CO RUNORNOT  RUN
CO AVERTIME  PERIOD
CO POLLUTID  DPM
CO FINISHED

SO STARTING
SO ELEVUNIT  METERS
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      7.2  7.2  7.2  7.2
273   SO EMISFACT  405N0727  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
274   SO EMISFACT  405N0727  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
275   SO EMISFACT  405N0727  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
276   SO EMISFACT  405N0727  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
277   SO EMISFACT  405N0728  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
278   SO EMISFACT  405N0728  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
279   SO EMISFACT  405N0728  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
280   SO EMISFACT  405N0728  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
281   SO EMISFACT  405N0728  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
282   SO EMISFACT  405N0729  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
283   SO EMISFACT  405N0729  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
284   SO EMISFACT  405N0729  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
285   SO EMISFACT  405N0729  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
286   SO EMISFACT  405N0729  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
287   SO EMISFACT  405N0730  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
288   SO EMISFACT  405N0730  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
289   SO EMISFACT  405N0730  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
290   SO EMISFACT  405N0730  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
291   SO EMISFACT  405N0730  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
292   SO EMISFACT  405N0731  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
293   SO EMISFACT  405N0731  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
294   SO EMISFACT  405N0731  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
295   SO EMISFACT  405N0731  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
296   SO EMISFACT  405N0731  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
297   SO EMISFACT  405N0732  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
298   SO EMISFACT  405N0732  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
299   SO EMISFACT  405N0732  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
300   SO EMISFACT  405N0732  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
301   SO EMISFACT  405N0732  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
302   SO EMISFACT  405N0733  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
```

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      7.2  7.2  7.2  7.2
303   SO EMISFACT  405N0733  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
304   SO EMISFACT  405N0733  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
305   SO EMISFACT  405N0733  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
306   SO EMISFACT  405N0733  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
307   SO EMISFACT  405N0734  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
308   SO EMISFACT  405N0734  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
309   SO EMISFACT  405N0734  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
310   SO EMISFACT  405N0734  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
311   SO EMISFACT  405N0734  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
312   SO EMISFACT  405N0735  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
313   SO EMISFACT  405N0735  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
314   SO EMISFACT  405N0735  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
315   SO EMISFACT  405N0735  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
316   SO EMISFACT  405N0735  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
317   SO EMISFACT  405N0736  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
318   SO EMISFACT  405N0736  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
319   SO EMISFACT  405N0736  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
320   SO EMISFACT  405N0736  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
321   SO EMISFACT  405N0736  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
322   SO EMISFACT  405N0737  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
323   SO EMISFACT  405N0737  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
324   SO EMISFACT  405N0737  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
325   SO EMISFACT  405N0737  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
326   SO EMISFACT  405N0737  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
327   SO EMISFACT  405N0738  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
328   SO EMISFACT  405N0738  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
329   SO EMISFACT  405N0738  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
330   SO EMISFACT  405N0738  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
331   SO EMISFACT  405N0738  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
332   SO EMISFACT  405N0739  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
333   SO EMISFACT  405N0739  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
334   SO EMISFACT  405N0739  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
335   SO EMISFACT  405N0739  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
336   SO EMISFACT  405N0739  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
337   SO EMISFACT  405N0740  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
338   SO EMISFACT  405N0740  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
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339   SO EMISFACT  405N0740  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
340   SO EMISFACT  405N0740  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
341   SO EMISFACT  405N0740  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
342   SO EMISFACT  405N0741  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
343   SO EMISFACT  405N0741  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
344   SO EMISFACT  405N0741  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
345   SO EMISFACT  405N0741  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
346   SO EMISFACT  405N0741  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
347   SO EMISFACT  405N0742  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
348   SO EMISFACT  405N0742  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
349   SO EMISFACT  405N0742  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
350   SO EMISFACT  405N0742  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
351   SO EMISFACT  405N0742  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
352   SO EMISFACT  405N0743  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
353   SO EMISFACT  405N0743  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
354   SO EMISFACT  405N0743  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
355   SO EMISFACT  405N0743  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
356   SO EMISFACT  405N0743  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
357   SO EMISFACT  405N0744  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
358   SO EMISFACT  405N0744  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
359   SO EMISFACT  405N0744  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
360   SO EMISFACT  405N0744  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
361   SO EMISFACT  405N0744  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
362   SO EMISFACT  405N0745  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
363   SO EMISFACT  405N0745  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
364   SO EMISFACT  405N0745  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
365   SO EMISFACT  405N0745  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
366   SO EMISFACT  405N0745  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
367   SO EMISFACT  405N0746  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
368   SO EMISFACT  405N0746  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
369   SO EMISFACT  405N0746  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
370   SO EMISFACT  405N0746  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
371   SO EMISFACT  405N0746  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
372   SO EMISFACT  405N0747  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
373   SO EMISFACT  405N0747  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
374   SO EMISFACT  405N0747  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
375   SO EMISFACT  405N0747  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
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      0.0  0.0  0.0  0.0
376   SO EMISFACT  405N0747  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
377   SO EMISFACT  405N0748  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
378   SO EMISFACT  405N0748  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
379   SO EMISFACT  405N0748  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
380   SO EMISFACT  405N0748  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
381   SO EMISFACT  405N0748  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
382   SO EMISFACT  405N0749  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
383   SO EMISFACT  405N0749  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
384   SO EMISFACT  405N0749  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
385   SO EMISFACT  405N0749  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
386   SO EMISFACT  405N0749  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
387   SO EMISFACT  405N0750  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
388   SO EMISFACT  405N0750  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
389   SO EMISFACT  405N0750  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
390   SO EMISFACT  405N0750  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
391   SO EMISFACT  405N0750  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
392   SO EMISFACT  405N0751  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
393   SO EMISFACT  405N0751  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
394   SO EMISFACT  405N0751  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
395   SO EMISFACT  405N0751  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
396   SO EMISFACT  405N0751  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
397   SO EMISFACT  405N0752  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
398   SO EMISFACT  405N0752  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
399   SO EMISFACT  405N0752  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
400   SO EMISFACT  405N0752  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
401   SO EMISFACT  405N0752  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
402   SO EMISFACT  405N0753  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
403   SO EMISFACT  405N0753  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
404   SO EMISFACT  405N0753  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
405   SO EMISFACT  405N0753  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
406   SO EMISFACT  405N0753  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
407   SO EMISFACT  405N0754  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
408   SO EMISFACT  405N0754  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
409   SO EMISFACT  405N0754  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
410   SO EMISFACT  405N0754  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
411   SO EMISFACT  405N0754  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
412   SO EMISFACT  405N0755  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
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      7.2  7.2  7.2  7.2
413   SO EMISFACT  405N0755  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
414   SO EMISFACT  405N0755  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
415   SO EMISFACT  405N0755  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
416   SO EMISFACT  405N0755  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
417   SO EMISFACT  405N0756  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
418   SO EMISFACT  405N0756  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
419   SO EMISFACT  405N0756  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
420   SO EMISFACT  405N0756  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
421   SO EMISFACT  405N0756  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
422   SO EMISFACT  405N0757  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
423   SO EMISFACT  405N0757  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
424   SO EMISFACT  405N0757  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
425   SO EMISFACT  405N0757  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
426   SO EMISFACT  405N0757  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
427   SO EMISFACT  405N0758  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
428   SO EMISFACT  405N0758  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
429   SO EMISFACT  405N0758  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
430   SO EMISFACT  405N0758  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
431   SO EMISFACT  405N0758  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
432   SO EMISFACT  405N0759  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
433   SO EMISFACT  405N0759  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
434   SO EMISFACT  405N0759  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
435   SO EMISFACT  405N0759  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
436   SO EMISFACT  405N0759  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
437   SO EMISFACT  405N0760  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
438   SO EMISFACT  405N0760  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
439   SO EMISFACT  405N0760  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
440   SO EMISFACT  405N0760  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
441   SO EMISFACT  405N0760  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
442   SO EMISFACT  405N0761  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
443   SO EMISFACT  405N0761  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
444   SO EMISFACT  405N0761  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
445   SO EMISFACT  405N0761  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
446   SO EMISFACT  405N0761  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
447   SO EMISFACT  405N0762  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
448   SO EMISFACT  405N0762  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
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449   SO EMISFACT  405N0762  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
450   SO EMISFACT  405N0762  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
451   SO EMISFACT  405N0762  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
452   SO EMISFACT  405N0763  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
453   SO EMISFACT  405N0763  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
454   SO EMISFACT  405N0763  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
455   SO EMISFACT  405N0763  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
456   SO EMISFACT  405N0763  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
457   SO EMISFACT  405N0764  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
458   SO EMISFACT  405N0764  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
459   SO EMISFACT  405N0764  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
460   SO EMISFACT  405N0764  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
461   SO EMISFACT  405N0764  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
462   SO EMISFACT  405N0765  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
463   SO EMISFACT  405N0765  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
464   SO EMISFACT  405N0765  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
465   SO EMISFACT  405N0765  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
466   SO EMISFACT  405N0765  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
467   SO EMISFACT  405N0766  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
468   SO EMISFACT  405N0766  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
469   SO EMISFACT  405N0766  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
470   SO EMISFACT  405N0766  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
471   SO EMISFACT  405N0766  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
472   SO EMISFACT  405N0767  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
473   SO EMISFACT  405N0767  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
474   SO EMISFACT  405N0767  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
475   SO EMISFACT  405N0767  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
476   SO EMISFACT  405N0767  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
477   SO EMISFACT  405S0676  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
478   SO EMISFACT  405S0676  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
479   SO EMISFACT  405S0676  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
480   SO EMISFACT  405S0676  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
481   SO EMISFACT  405S0676  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
482   SO EMISFACT  405S0677  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
483   SO EMISFACT  405S0677  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
484   SO EMISFACT  405S0677  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
485   SO EMISFACT  405S0677  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
```

```
      0.0  0.0  0.0  0.0
486   SO EMISFACT  405S0677  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
487   SO EMISFACT  405S0678  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
488   SO EMISFACT  405S0678  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
489   SO EMISFACT  405S0678  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
490   SO EMISFACT  405S0678  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
491   SO EMISFACT  405S0678  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
492   SO EMISFACT  405S0679  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
493   SO EMISFACT  405S0679  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
494   SO EMISFACT  405S0679  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
495   SO EMISFACT  405S0679  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
496   SO EMISFACT  405S0679  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
497   SO EMISFACT  405S0680  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
498   SO EMISFACT  405S0680  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
499   SO EMISFACT  405S0680  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
500   SO EMISFACT  405S0680  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
501   SO EMISFACT  405S0680  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
502   SO EMISFACT  405S0681  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
503   SO EMISFACT  405S0681  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
504   SO EMISFACT  405S0681  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
505   SO EMISFACT  405S0681  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
506   SO EMISFACT  405S0681  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
507   SO EMISFACT  405S0682  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
508   SO EMISFACT  405S0682  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
509   SO EMISFACT  405S0682  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
510   SO EMISFACT  405S0682  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
511   SO EMISFACT  405S0682  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
512   SO EMISFACT  405S0683  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
513   SO EMISFACT  405S0683  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
514   SO EMISFACT  405S0683  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
515   SO EMISFACT  405S0683  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
516   SO EMISFACT  405S0683  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
517   SO EMISFACT  405S0684  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
518   SO EMISFACT  405S0684  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
519   SO EMISFACT  405S0684  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
520   SO EMISFACT  405S0684  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
521   SO EMISFACT  405S0684  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
522   SO EMISFACT  405S0685  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
```

```
      7.2  7.2  7.2  7.2
523   SO EMISFACT  405S0685  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
524   SO EMISFACT  405S0685  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
525   SO EMISFACT  405S0685  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
526   SO EMISFACT  405S0685  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
527   SO EMISFACT  405S0686  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
528   SO EMISFACT  405S0686  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
529   SO EMISFACT  405S0686  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
530   SO EMISFACT  405S0686  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
531   SO EMISFACT  405S0686  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
532   SO EMISFACT  405S0687  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
533   SO EMISFACT  405S0687  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
534   SO EMISFACT  405S0687  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
535   SO EMISFACT  405S0687  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
536   SO EMISFACT  405S0687  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
537   SO EMISFACT  405S0688  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
538   SO EMISFACT  405S0688  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
539   SO EMISFACT  405S0688  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
540   SO EMISFACT  405S0688  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
541   SO EMISFACT  405S0688  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
542   SO EMISFACT  405S0689  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
543   SO EMISFACT  405S0689  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
544   SO EMISFACT  405S0689  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
545   SO EMISFACT  405S0689  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
546   SO EMISFACT  405S0689  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
547   SO EMISFACT  405S0690  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
548   SO EMISFACT  405S0690  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
549   SO EMISFACT  405S0690  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
550   SO EMISFACT  405S0690  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
551   SO EMISFACT  405S0690  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
552   SO EMISFACT  405S0691  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
553   SO EMISFACT  405S0691  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
554   SO EMISFACT  405S0691  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
555   SO EMISFACT  405S0691  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
556   SO EMISFACT  405S0691  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
557   SO EMISFACT  405S0692  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
558   SO EMISFACT  405S0692  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
```

```
559   SO EMISFACT  405S0692  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
560   SO EMISFACT  405S0692  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
561   SO EMISFACT  405S0692  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
562   SO EMISFACT  405S0693  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
563   SO EMISFACT  405S0693  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
564   SO EMISFACT  405S0693  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
565   SO EMISFACT  405S0693  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
566   SO EMISFACT  405S0693  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
567   SO EMISFACT  405S0694  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
568   SO EMISFACT  405S0694  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
569   SO EMISFACT  405S0694  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
570   SO EMISFACT  405S0694  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
571   SO EMISFACT  405S0694  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
572   SO EMISFACT  405S0695  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
573   SO EMISFACT  405S0695  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
574   SO EMISFACT  405S0695  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
575   SO EMISFACT  405S0695  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
576   SO EMISFACT  405S0695  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
577   SO EMISFACT  405S0696  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
578   SO EMISFACT  405S0696  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
579   SO EMISFACT  405S0696  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
580   SO EMISFACT  405S0696  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
581   SO EMISFACT  405S0696  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
582   SO EMISFACT  405S0697  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
583   SO EMISFACT  405S0697  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
584   SO EMISFACT  405S0697  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
585   SO EMISFACT  405S0697  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
586   SO EMISFACT  405S0697  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
587   SO EMISFACT  405S0698  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
588   SO EMISFACT  405S0698  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
589   SO EMISFACT  405S0698  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
590   SO EMISFACT  405S0698  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
591   SO EMISFACT  405S0698  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
592   SO EMISFACT  405S0699  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
593   SO EMISFACT  405S0699  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
594   SO EMISFACT  405S0699  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
595   SO EMISFACT  405S0699  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
```

```
      0.0  0.0  0.0  0.0
596   SO EMISFACT  405S0699  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
597   SO EMISFACT  405S0700  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
598   SO EMISFACT  405S0700  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
599   SO EMISFACT  405S0700  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
600   SO EMISFACT  405S0700  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
601   SO EMISFACT  405S0700  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
602   SO EMISFACT  405S0701  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
603   SO EMISFACT  405S0701  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
604   SO EMISFACT  405S0701  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
605   SO EMISFACT  405S0701  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
606   SO EMISFACT  405S0701  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
607   SO EMISFACT  405S0702  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
608   SO EMISFACT  405S0702  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
609   SO EMISFACT  405S0702  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
610   SO EMISFACT  405S0702  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
611   SO EMISFACT  405S0702  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
612   SO EMISFACT  405S0703  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
613   SO EMISFACT  405S0703  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
614   SO EMISFACT  405S0703  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
615   SO EMISFACT  405S0703  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
616   SO EMISFACT  405S0703  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
617   SO EMISFACT  405S0704  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
618   SO EMISFACT  405S0704  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
619   SO EMISFACT  405S0704  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
620   SO EMISFACT  405S0704  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
621   SO EMISFACT  405S0704  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
622   SO EMISFACT  405S0705  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
623   SO EMISFACT  405S0705  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
624   SO EMISFACT  405S0705  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
625   SO EMISFACT  405S0705  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
626   SO EMISFACT  405S0705  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
627   SO EMISFACT  405S0706  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
628   SO EMISFACT  405S0706  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
629   SO EMISFACT  405S0706  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
630   SO EMISFACT  405S0706  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
631   SO EMISFACT  405S0706  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
632   SO EMISFACT  405S0707  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
```

```
      7.2  7.2  7.2  7.2
633   SO EMISFACT  405S0707  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
634   SO EMISFACT  405S0707  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
635   SO EMISFACT  405S0707  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
636   SO EMISFACT  405S0707  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
637   SO EMISFACT  405S0708  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
638   SO EMISFACT  405S0708  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
639   SO EMISFACT  405S0708  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
640   SO EMISFACT  405S0708  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
641   SO EMISFACT  405S0708  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
642   SO EMISFACT  405S0709  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
643   SO EMISFACT  405S0709  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
644   SO EMISFACT  405S0709  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
645   SO EMISFACT  405S0709  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
646   SO EMISFACT  405S0709  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
647   SO EMISFACT  405S0710  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
648   SO EMISFACT  405S0710  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
649   SO EMISFACT  405S0710  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
650   SO EMISFACT  405S0710  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
651   SO EMISFACT  405S0710  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
652   SO EMISFACT  405S0711  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
653   SO EMISFACT  405S0711  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
654   SO EMISFACT  405S0711  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
655   SO EMISFACT  405S0711  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
656   SO EMISFACT  405S0711  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
657   SO EMISFACT  405S0712  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
658   SO EMISFACT  405S0712  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
659   SO EMISFACT  405S0712  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
660   SO EMISFACT  405S0712  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
661   SO EMISFACT  405S0712  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
662   SO EMISFACT  405S0713  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
663   SO EMISFACT  405S0713  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
664   SO EMISFACT  405S0713  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
665   SO EMISFACT  405S0713  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
666   SO EMISFACT  405S0713  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
667   SO EMISFACT  405S0714  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
      7.2  7.2  7.2  7.2
668   SO EMISFACT  405S0714  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
      0.0  0.0  0.0  0.0
```

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669  SO EMISFACT  405S0714  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
670  SO EMISFACT  405S0714  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
671  SO EMISFACT  405S0714  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
672  SO EMISFACT  405S0715  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
     7.2  7.2  7.2  7.2
673  SO EMISFACT  405S0715  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
674  SO EMISFACT  405S0715  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
675  SO EMISFACT  405S0715  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
676  SO EMISFACT  405S0715  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
677  SO EMISFACT  405S0716  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
     7.2  7.2  7.2  7.2
678  SO EMISFACT  405S0716  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
679  SO EMISFACT  405S0716  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
680  SO EMISFACT  405S0716  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
681  SO EMISFACT  405S0716  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
682  SO EMISFACT  405S0717  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  7.2  7.2  7.2  7.2
     7.2  7.2  7.2  7.2
683  SO EMISFACT  405S0717  HRDOW  7.2  7.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
684  SO EMISFACT  405S0717  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
685  SO EMISFACT  405S0717  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
     0.0  0.0  0.0  0.0
686  SO EMISFACT  405S0717  HRDOW  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0
687  SO SRCGROUP  I-405N  405N0726  405N0727  405N0728  405N0729  405N0730  405N0731
     405N0732  405N0733
688  SO SRCGROUP  I-405N  405N0734  405N0735  405N0736  405N0737  405N0738  405N0739
     405N0740  405N0741
689  SO SRCGROUP  I-405N  405N0742  405N0743  405N0744  405N0745  405N0746  405N0747
     405N0748  405N0749
690  SO SRCGROUP  I-405N  405N0750  405N0751  405N0752  405N0753  405N0754  405N0755
     405N0756  405N0757
691  SO SRCGROUP  I-405N  405N0758  405N0759  405N0760  405N0761  405N0762  405N0763
     405N0764  405N0765
692  SO SRCGROUP  I-405N  405N0766  405N0767
693  SO SRCGROUP  I-405S  405S0676  405S0677  405S0678  405S0679  405S0680  405S0681
     405S0682  405S0683
694  SO SRCGROUP  I-405S  405S0684  405S0685  405S0686  405S0687  405S0688  405S0689
     405S0690  405S0691
695  SO SRCGROUP  I-405S  405S0692  405S0693  405S0694  405S0695  405S0696  405S0697
     405S0698  405S0699
696  SO SRCGROUP  I-405S  405S0700  405S0701  405S0702  405S0703  405S0704  405S0705
     405S0706  405S0707
697  SO SRCGROUP  I-405S  405S0708  405S0709  405S0710  405S0711  405S0712  405S0713
     405S0714  405S0715
698  SO SRCGROUP  I-405S  405S0716  405S0717
699  SO SRCGROUP  ALL
700  SO FINISHED
701
702  RE STARTING
703  RE DISCCART  364522  3789971
704  RE DISCCART  364522  3789971
705  RE DISCCART  364523  3789983
706  RE DISCCART  364523  3789983
707  RE DISCCART  364523  3789994
708  RE DISCCART  364523  3789994
709  RE DISCCART  364523  3790003
710  RE DISCCART  364523  3790003
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RE DISCCART  364540  3789994
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** RCPDESCR  fine grid
RE DISCCART  364514.7  3789954.9
** RCPDESCR  fine grid
RE DISCCART  364524.7  3789954.9
** RCPDESCR  fine grid
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778   ** RCPDESCR  fine grid
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783   RE DISCCART  364564.7  3789954.9
784   ** RCPDESCR  fine grid
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798   ** RCPDESCR  fine grid
799   RE DISCCART  364544.7  3789969.9
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801   RE DISCCART  364554.7  3789969.9
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804   ** RCPDESCR  fine grid
805   RE DISCCART  364574.7  3789969.9
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810   ** RCPDESCR  fine grid
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814   ** RCPDESCR  fine grid
815   RE DISCCART  364524.7  3789984.9
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817   RE DISCCART  364534.7  3789984.9
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824   ** RCPDESCR  fine grid
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833   RE DISCCART  364514.7  3789999.9
834   ** RCPDESCR  fine grid
835   RE DISCCART  364524.7  3789999.9
836   ** RCPDESCR  fine grid
837   RE DISCCART  364534.7  3789999.9
838   ** RCPDESCR  fine grid
839   RE DISCCART  364544.7  3789999.9
840   ** RCPDESCR  fine grid
841   RE DISCCART  364554.7  3789999.9
842   ** RCPDESCR  fine grid
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** RCPDESCR  fine grid
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** RCPDESCR  fine grid
RE DISCCART  364544.7  3790014.9
** RCPDESCR  fine grid
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RE DISCCART  364514.7  3790029.9
** RCPDESCR  fine grid
RE DISCCART  364524.7  3790029.9
** RCPDESCR  fine grid
RE DISCCART  364534.7  3790029.9
** RCPDESCR  fine grid
RE DISCCART  364544.7  3790029.9
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RE DISCCART  364554.7  3790029.9
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RE DISCCART  364564.7  3790029.9
** RCPDESCR  fine grid
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** RCPDESCR  fine grid
RE DISCCART  364524.7  3790044.9
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RE DISCCART  364534.7  3790044.9
** RCPDESCR  fine grid
RE DISCCART  364544.7  3790044.9
** RCPDESCR  fine grid
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RE DISCCART  364484.7  3790059.9
** RCPDESCR  fine grid
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RE DISCCART  364494.7  3790059.9
** RCPDESCR  fine grid
RE DISCCART  364504.7  3790059.9
** RCPDESCR  fine grid
RE DISCCART  364514.7  3790059.9
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RE DISCCART  364524.7  3790059.9
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RE DISCCART  364534.7  3790059.9
** RCPDESCR  fine grid
RE DISCCART  364544.7  3790059.9
** RCPDESCR  fine grid
RE DISCCART  364554.7  3790059.9
** RCPDESCR  fine grid
RE DISCCART  364564.7  3790059.9
** RCPDESCR  fine grid
RE DISCCART  364574.7  3790059.9
** RCPDESCR  fine grid
RE FINISHED

ME STARTING
ME SURFFILE  "C:\Users\jclar\OneDrive\CLARKA~1\PR3138~1\KVNY_V~1\KVNY_V9.SFC"
** SURFFILE  "C:\Users\jclar\OneDrive\CLARKA~1\PR3138~1\KVNY_V~1\KVNY_V9.SFC"
ME PROFFILE  "C:\Users\jclar\OneDrive\CLARKA~1\PR3138~1\KVNY_V~1\KVNY_V9.PFL"
** PROFFILE  "C:\Users\jclar\OneDrive\CLARKA~1\PR3138~1\KVNY_V~1\KVNY_V9.PFL"
ME SURFDATA  23130 2012
ME UAIRDATA  3190 2012
ME PROFBASE  235  METERS
ME FINISHED

OU STARTING
OU FILEFORM  FIX
OU PLOTFILE  PERIOD  I-405N  I-405N`PERIOD.plt  10000
OU PLOTFILE  PERIOD  I-405S  I-405S`PERIOD.plt  10001
OU PLOTFILE  PERIOD  ALL  ALL`PERIOD.plt  10002
OU POSTFILE  PERIOD  I-405N  UNFORM  I-405N`PERIOD.bin  10003
OU POSTFILE  PERIOD  I-405S  UNFORM  I-405S`PERIOD.bin  10004
OU POSTFILE  PERIOD  ALL  UNFORM  ALL`PERIOD.bin  10005
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            9 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


    ********   WARNING MESSAGES   ********
 CO W151       7       MODOPT: Non-DFAULT NoUrbTran option selected on MODELOPT
 Keyword
 ME W186     937       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used          0.50
 ME W187     937       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET
 OU W565     941       PERPLT: Possible Conflict With Dynamically Allocated FUNIT
 PLOTFILE
 OU W565     942       PERPLT: Possible Conflict With Dynamically Allocated FUNIT
 PLOTFILE
 OU W565     943       PERPLT: Possible Conflict With Dynamically Allocated FUNIT
```

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     PLOTFILE
 970 OU W565     944       PERPST: Possible Conflict With Dynamically Allocated FUNIT
     POSTFILE
 971 OU W565     945       PERPST: Possible Conflict With Dynamically Allocated FUNIT
     POSTFILE
 972 OU W565     946       PERPST: Possible Conflict With Dynamically Allocated FUNIT
     POSTFILE
 973
 974 ***********************************
 975 *** SETUP Finishes Successfully ***
 976 ***********************************
 977
 978 FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
     I-405                         ***        12/13/22
 979  *** AERMET - VERSION  16216 ***
      ***                                                              ***
      17:15:37
 980
                                PAGE   1
 981 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
 982
 983                                          ***     MODEL SETUP OPTIONS SUMMARY       ***
 984 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
     - - - - - - - - - - - - - - - - - -
 985
 986 ** Model Options Selected:
 987      * Model Allows User-Specified Options
 988      * Model Is Setup For Calculation of Average CONCentration Values.
 989      * NO GAS DEPOSITION Data Provided.
 990      * NO PARTICLE DEPOSITION Data Provided.
 991      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
 992      * Model Uses NO WET DEPLETION. WETDPLT  =  F
 993      * Stack-tip Downwash.
 994      * Model Assumes Receptors on FLAT Terrain.
 995      * Use Calms Processing Routine.
 996      * Use Missing Data Processing Routine.
 997      * No Exponential Decay.
 998      * Model Uses RURAL Dispersion Only.
 999      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
1000      * CCVR_Sub - Meteorological data includes CCVR substitutions
1001      * TEMP_Sub - Meteorological data includes TEMP substitutions
1002      * Model Assumes No FLAGPOLE Receptor Heights.
1003      * The User Specified a Pollutant Type of: DPM
1004
1005 **Model Calculates PERIOD Averages Only
1006
1007 **This Run Includes:     84 Source(s);       3 Source Group(s); and     124 Receptor(s)
1008
1009                 with:      0 POINT(s), including
1010                            0 POINTCAP(s) and      0 POINTHOR(s)
1011                  and:     84 VOLUME source(s)
1012                  and:      0 AREA type source(s)
1013                  and:      0 LINE source(s)
1014                  and:      0 RLINE/RLINEXT source(s)
1015                  and:      0 OPENPIT source(s)
1016                  and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
1017                  and:      0 SWPOINT source(s)
1018
1019
1020 **Model Set To Continue RUNning After the Setup Testing.
1021
1022 **The AERMET Input Meteorological Data Version Date:  16216
1023
1024 **Output Options Selected:
1025          Model Outputs Tables of PERIOD Averages by Receptor
1026          Model Outputs External File(s) of Concurrent Values for Postprocessing
```

(POSTFILE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 235.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.6 MB of RAM.

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out

FF *** AERMOD - VERSION 22112 *** *** Valor Elementary Exposure To DPM From I-405 *** 12/13/22
*** AERMET - VERSION 16216 ***
*** ***
17:15:37

PAGE 2

*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ	URBAN SOURCE	SCALAR VARY BY
405N0726	0	0.23810E-01	364442.9	3790945.0	235.0	1.43	22.83	1.33	NO	HRDOW
405N0727	0	0.23810E-01	364441.5	3790895.8	235.0	1.43	22.83	1.33	NO	HRDOW
405N0728	0	0.23810E-01	364440.1	3790846.7	235.0	1.43	22.83	1.33	NO	HRDOW
405N0729	0	0.23810E-01	364438.8	3790797.5	235.0	1.43	22.83	1.33	NO	HRDOW
405N0730	0	0.23810E-01	364437.4	3790748.3	235.0	1.43	22.83	1.33	NO	HRDOW
405N0731	0	0.23810E-01	364429.1	3790699.8	235.0	1.43	22.83	1.33	NO	HRDOW
405N0732	0	0.23810E-01	364420.6	3790651.3	235.0	1.43	22.83	1.33	NO	HRDOW
405N0733	0	0.23810E-01	364412.0	3790602.9	235.0	1.43	22.83	1.33	NO	HRDOW
405N0734	0	0.23810E-01	364403.0	3790554.5	235.0	1.43	22.83	1.33	NO	HRDOW
405N0735	0	0.23810E-01	364393.9	3790506.2	235.0	1.43	22.83	1.33	NO	HRDOW
405N0736	0	0.23810E-01	364384.8	3790457.8	235.0	1.43	22.83	1.33	NO	HRDOW

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405N0737         0   0.23810E-01  364377.1 3790409.3   235.0     1.43    22.83
1.33     NO    HRDOW
405N0738         0   0.23810E-01  364372.8 3790360.3   235.0     1.43    22.83
1.33     NO    HRDOW
405N0739         0   0.23810E-01  364369.8 3790311.2   235.0     1.43    22.83
1.33     NO    HRDOW
405N0740         0   0.23810E-01  364368.9 3790262.0   235.0     1.43    22.83
1.33     NO    HRDOW
405N0741         0   0.23810E-01  364368.0 3790212.8   235.0     1.43    22.83
1.33     NO    HRDOW
405N0742         0   0.23810E-01  364367.1 3790163.6   235.0     1.43    22.83
1.33     NO    HRDOW
405N0743         0   0.23810E-01  364366.1 3790114.4   235.0     1.43    22.83
1.33     NO    HRDOW
405N0744         0   0.23810E-01  364365.2 3790065.2   235.0     1.43    22.83
1.33     NO    HRDOW
405N0745         0   0.23810E-01  364364.3 3790016.0   235.0     1.43    22.83
1.33     NO    HRDOW
405N0746         0   0.23810E-01  364363.4 3789966.9   235.0     1.43    22.83
1.33     NO    HRDOW
405N0747         0   0.23810E-01  364362.1 3789917.7   235.0     1.43    22.83
1.33     NO    HRDOW
405N0748         0   0.23810E-01  364360.5 3789868.5   235.0     1.43    22.83
1.33     NO    HRDOW
405N0749         0   0.23810E-01  364358.9 3789819.3   235.0     1.43    22.83
1.33     NO    HRDOW
405N0750         0   0.23810E-01  364357.3 3789770.2   235.0     1.43    22.83
1.33     NO    HRDOW
405N0751         0   0.23810E-01  364356.2 3789721.0   235.0     1.43    22.83
1.33     NO    HRDOW
405N0752         0   0.23810E-01  364355.0 3789671.8   235.0     1.43    22.83
1.33     NO    HRDOW
405N0753         0   0.23810E-01  364353.8 3789622.6   235.0     1.43    22.83
1.33     NO    HRDOW
405N0754         0   0.23810E-01  364352.6 3789573.4   235.0     1.43    22.83
1.33     NO    HRDOW
405N0755         0   0.23810E-01  364351.5 3789524.2   235.0     1.43    22.83
1.33     NO    HRDOW
405N0756         0   0.23810E-01  364350.3 3789475.0   235.0     1.43    22.83
1.33     NO    HRDOW
405N0757         0   0.23810E-01  364349.1 3789425.8   235.0     1.43    22.83
1.33     NO    HRDOW
405N0758         0   0.23810E-01  364348.6 3789376.7   235.0     1.43    22.83
1.33     NO    HRDOW
405N0759         0   0.23810E-01  364348.0 3789327.5   235.0     1.43    22.83
1.33     NO    HRDOW
405N0760         0   0.23810E-01  364347.5 3789278.3   235.0     1.43    22.83
1.33     NO    HRDOW
405N0761         0   0.23810E-01  364346.9 3789229.1   235.0     1.43    22.83
1.33     NO    HRDOW
405N0762         0   0.23810E-01  364346.4 3789179.9   235.0     1.43    22.83
1.33     NO    HRDOW
405N0763         0   0.23810E-01  364345.8 3789130.7   235.0     1.43    22.83
1.33     NO    HRDOW
405N0764         0   0.23810E-01  364345.0 3789081.5   235.0     1.43    22.83
1.33     NO    HRDOW
405N0765         0   0.23810E-01  364344.2 3789032.3   235.0     1.43    22.83
1.33     NO    HRDOW
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***
 17:15:37

                                PAGE   3
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
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*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ	INIT. URBAN SOURCE VARY BY
405N0766	0	0.23810E-01	364343.4	3788983.1	235.0	1.43	22.83	1.33	NO HRDOW
405N0767	0	0.23810E-01	364342.6	3788933.9	235.0	1.43	22.83	1.33	NO HRDOW
405S0676	0	0.23810E-01	364420.3	3790946.7	235.0	1.43	22.83	1.33	NO HRDOW
405S0677	0	0.23810E-01	364419.4	3790897.6	235.0	1.43	22.83	1.33	NO HRDOW
405S0678	0	0.23810E-01	364418.5	3790848.4	235.0	1.43	22.83	1.33	NO HRDOW
405S0679	0	0.23810E-01	364417.7	3790799.2	235.0	1.43	22.83	1.33	NO HRDOW
405S0680	0	0.23810E-01	364416.8	3790750.0	235.0	1.43	22.83	1.33	NO HRDOW
405S0681	0	0.23810E-01	364409.9	3790701.3	235.0	1.43	22.83	1.33	NO HRDOW
405S0682	0	0.23810E-01	364403.0	3790652.6	235.0	1.43	22.83	1.33	NO HRDOW
405S0683	0	0.23810E-01	364393.7	3790604.2	235.0	1.43	22.83	1.33	NO HRDOW
405S0684	0	0.23810E-01	364384.2	3790556.0	235.0	1.43	22.83	1.33	NO HRDOW
405S0685	0	0.23810E-01	364374.6	3790507.7	235.0	1.43	22.83	1.33	NO HRDOW
405S0686	0	0.23810E-01	364365.0	3790459.5	235.0	1.43	22.83	1.33	NO HRDOW
405S0687	0	0.23810E-01	364358.2	3790410.9	235.0	1.43	22.83	1.33	NO HRDOW
405S0688	0	0.23810E-01	364356.0	3790361.7	235.0	1.43	22.83	1.33	NO HRDOW
405S0689	0	0.23810E-01	364353.8	3790312.6	235.0	1.43	22.83	1.33	NO HRDOW
405S0690	0	0.23810E-01	364351.6	3790263.4	235.0	1.43	22.83	1.33	NO HRDOW
405S0691	0	0.23810E-01	364349.5	3790214.3	235.0	1.43	22.83	1.33	NO HRDOW
405S0692	0	0.23810E-01	364348.4	3790165.1	235.0	1.43	22.83	1.33	NO HRDOW
405S0693	0	0.23810E-01	364347.4	3790115.9	235.0	1.43	22.83	1.33	NO HRDOW
405S0694	0	0.23810E-01	364346.3	3790066.7	235.0	1.43	22.83	1.33	NO HRDOW
405S0695	0	0.23810E-01	364345.2	3790017.5	235.0	1.43	22.83	1.33	NO HRDOW
405S0696	0	0.23810E-01	364344.1	3789968.3	235.0	1.43	22.83	1.33	NO HRDOW
405S0697	0	0.23810E-01	364343.0	3789919.1	235.0	1.43	22.83	1.33	NO HRDOW
405S0698	0	0.23810E-01	364341.9	3789869.9	235.0	1.43	22.83	1.33	NO HRDOW
405S0699	0	0.23810E-01	364340.8	3789820.8	235.0	1.43	22.83	1.33	NO HRDOW
405S0700	0	0.23810E-01	364339.7	3789771.6	235.0	1.43	22.83		

```
      1.33     NO    HRDOW
1135  405S0701         0   0.23810E-01  364338.6 3789722.4   235.0     1.43    22.83
      1.33     NO    HRDOW
1136  405S0702         0   0.23810E-01  364337.6 3789673.2   235.0     1.43    22.83
      1.33     NO    HRDOW
1137  405S0703         0   0.23810E-01  364336.5 3789624.0   235.0     1.43    22.83
      1.33     NO    HRDOW
1138  405S0704         0   0.23810E-01  364335.4 3789574.8   235.0     1.43    22.83
      1.33     NO    HRDOW
1139  405S0705         0   0.23810E-01  364334.3 3789525.6   235.0     1.43    22.83
      1.33     NO    HRDOW
1140  405S0706         0   0.23810E-01  364333.2 3789476.4   235.0     1.43    22.83
      1.33     NO    HRDOW
1141  405S0707         0   0.23810E-01  364332.1 3789427.3   235.0     1.43    22.83
      1.33     NO    HRDOW
1142  405S0708         0   0.23810E-01  364331.1 3789378.1   235.0     1.43    22.83
      1.33     NO    HRDOW
1143  405S0709         0   0.23810E-01  364330.0 3789328.9   235.0     1.43    22.83
      1.33     NO    HRDOW
1144  405S0710         0   0.23810E-01  364328.9 3789279.7   235.0     1.43    22.83
      1.33     NO    HRDOW
1145  405S0711         0   0.23810E-01  364327.9 3789230.5   235.0     1.43    22.83
      1.33     NO    HRDOW
1146  405S0712         0   0.23810E-01  364326.8 3789181.3   235.0     1.43    22.83
      1.33     NO    HRDOW
1147  405S0713         0   0.23810E-01  364325.7 3789132.1   235.0     1.43    22.83
      1.33     NO    HRDOW
1148  FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
      I-405                         ***        12/13/22
1149   *** AERMET - VERSION  16216 ***
       ***                                                                    ***
       17:15:37
1150
                                  PAGE   4
1151  *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1152
1153
1154                                                  *** VOLUME SOURCE DATA ***
1155
1156                NUMBER EMISSION RATE                      BASE    RELEASE    INIT.
                    INIT.   URBAN  EMISSION RATE
1157      SOURCE     PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
          SZ     SOURCE  SCALAR VARY
1158        ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
            (METERS)              BY
1159  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - -
1160
1161   405S0714         0   0.23810E-01  364324.6 3789082.9   235.0     1.43    22.83
       1.33     NO    HRDOW
1162   405S0715         0   0.23810E-01  364323.6 3789033.7   235.0     1.43    22.83
       1.33     NO    HRDOW
1163   405S0716         0   0.23810E-01  364322.6 3788984.6   235.0     1.43    22.83
       1.33     NO    HRDOW
1164   405S0717         0   0.23810E-01  364321.7 3788935.4   235.0     1.43    22.83
       1.33     NO    HRDOW
1165  FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
      I-405                         ***        12/13/22
1166   *** AERMET - VERSION  16216 ***
       ***                                                                    ***
       17:15:37
1167
                                  PAGE   5
1168  *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1169
1170
```

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
I-405N	405N0726 , 405N0727 , 405N0728 , 405N0729 , 405N0730 , 405N0731 , 405N0732 , 405N0733 ,
	405N0734 , 405N0735 , 405N0736 , 405N0737 , 405N0738 , 405N0739 , 405N0740 , 405N0741 ,
	405N0742 , 405N0743 , 405N0744 , 405N0745 , 405N0746 , 405N0747 , 405N0748 , 405N0749 ,
	405N0750 , 405N0751 , 405N0752 , 405N0753 , 405N0754 , 405N0755 , 405N0756 , 405N0757 ,
	405N0758 , 405N0759 , 405N0760 , 405N0761 , 405N0762 , 405N0763 , 405N0764 , 405N0765 ,
	405N0766 , 405N0767 ,
I-405S	405S0676 , 405S0677 , 405S0678 , 405S0679 , 405S0680 , 405S0681 , 405S0682 , 405S0683 ,
	405S0684 , 405S0685 , 405S0686 , 405S0687 , 405S0688 , 405S0689 , 405S0690 , 405S0691 ,
	405S0692 , 405S0693 , 405S0694 , 405S0695 , 405S0696 , 405S0697 , 405S0698 , 405S0699 ,
	405S0700 , 405S0701 , 405S0702 , 405S0703 , 405S0704 , 405S0705 , 405S0706 , 405S0707 ,
	405S0708 , 405S0709 , 405S0710 , 405S0711 , 405S0712 , 405S0713 , 405S0714 , 405S0715 ,
	405S0716 , 405S0717 ,
ALL	405N0726 , 405N0727 , 405N0728 , 405N0729 , 405N0730 , 405N0731 , 405N0732 , 405N0733 ,
	405N0734 , 405N0735 , 405N0736 , 405N0737 , 405N0738 , 405N0739 , 405N0740 , 405N0741 ,
	405N0742 , 405N0743 , 405N0744 , 405N0745 , 405N0746 , 405N0747 , 405N0748 , 405N0749 ,
	405N0750 , 405N0751 , 405N0752 , 405N0753 , 405N0754 , 405N0755 , 405N0756 , 405N0757 ,
	405N0758 , 405N0759 , 405N0760 , 405N0761 , 405N0762 , 405N0763 , 405N0764 , 405N0765 ,
	405N0766 , 405N0767 , 405S0676 , 405S0677 , 405S0678 , 405S0679 , 405S0680 , 405S0681 ,
	405S0682 , 405S0683 , 405S0684 , 405S0685 , 405S0686 , 405S0687 , 405S0688 , 405S0689 ,
	405S0690 , 405S0691 , 405S0692 , 405S0693 , 405S0694 , 405S0695 , 405S0696 , 405S0697 ,

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
	405S0698 , 405S0699 , 405S0700 , 405S0701 , 405S0702 , 405S0703 , 405S0704 , 405S0705 ,
	405S0706 , 405S0707 , 405S0708 , 405S0709 , 405S0710 , 405S0711 , 405S0712 , 405S0713 ,
	405S0714 , 405S0715 , 405S0716 , 405S0717 ,

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0726 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

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1259
1260                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1261
1262    SOURCE ID = 405N0727     ; SOURCE TYPE = VOLUME   :
1263     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1264    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1265                                                DAY OF WEEK = WEEKDAY
1266       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
1267       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
1268      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1269                                                DAY OF WEEK = SATURDAY
1270       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1271       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1272      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1273                                                DAY OF WEEK = SUNDAY
1274       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1275       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1276      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1277    FE *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
        I-405                          ***        12/13/22
1278     *** AERMET - VERSION  16216 ***
         ***                                                                    ***
         17:15:37
1279
                                    PAGE   9
1280    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1281
1282                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1283
1284    SOURCE ID = 405N0728     ; SOURCE TYPE = VOLUME   :
1285     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1286    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1287                                                DAY OF WEEK = WEEKDAY
1288       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
1289       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
1290      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1291                                                DAY OF WEEK = SATURDAY
1292       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1293       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1294      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1295                                                DAY OF WEEK = SUNDAY
1296       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1297       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
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1298      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1299   FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
       I-405                         ***        12/13/22
1300       *** AERMET - VERSION  16216 ***
           ***                                                              ***
           17:15:37
1301
                                    PAGE  10
1302       *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1303
1304                         * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                            WEEK (HRDOW) *
1305
1306       SOURCE ID = 405N0729     ; SOURCE TYPE = VOLUME   :
1307        HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
           SCALAR   HOUR   SCALAR   HOUR   SCALAR
1308       - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
           - - - - - - - - - - - - - - - - - - - -
1309                                                  DAY OF WEEK = WEEKDAY
1310          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
              .0000E+00    7  .0000E+00    8  .7200E+01
1311          9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
              .7200E+01   15  .7200E+01   16  .7200E+01
1312        17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
            .0000E+00   23  .0000E+00   24  .0000E+00
1313                                                  DAY OF WEEK = SATURDAY
1314          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
              .0000E+00    7  .0000E+00    8  .0000E+00
1315          9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
              .0000E+00   15  .0000E+00   16  .0000E+00
1316        17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
            .0000E+00   23  .0000E+00   24  .0000E+00
1317                                                  DAY OF WEEK = SUNDAY
1318          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
              .0000E+00    7  .0000E+00    8  .0000E+00
1319          9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
              .0000E+00   15  .0000E+00   16  .0000E+00
1320        17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
            .0000E+00   23  .0000E+00   24  .0000E+00
1321   FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
       I-405                         ***        12/13/22
1322       *** AERMET - VERSION  16216 ***
           ***                                                              ***
           17:15:37
1323
                                    PAGE  11
1324       *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1325
1326                         * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                            WEEK (HRDOW) *
1327
1328       SOURCE ID = 405N0730     ; SOURCE TYPE = VOLUME   :
1329        HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
           SCALAR   HOUR   SCALAR   HOUR   SCALAR
1330       - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
           - - - - - - - - - - - - - - - - - - - -
1331                                                  DAY OF WEEK = WEEKDAY
1332          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
              .0000E+00    7  .0000E+00    8  .7200E+01
1333          9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
              .7200E+01   15  .7200E+01   16  .7200E+01
1334        17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
            .0000E+00   23  .0000E+00   24  .0000E+00
1335                                                  DAY OF WEEK = SATURDAY
1336          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

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      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***
 17:15:37

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 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405N0731     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .7200E+01
      9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
      .7200E+01   15  .7200E+01   16  .7200E+01
     17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***
 17:15:37

                               PAGE  13
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405N0732     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

- -

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01 14 .7200E+01 15 .7200E+01 16 .7200E+01
17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

FF *** AERMOD - VERSION 22112 *** *** Valor Elementary Exposure To DPM From I-405 *** 12/13/22
*** AERMET - VERSION 16216 ***
*** ***
17:15:37

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*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0733 ; SOURCE TYPE = VOLUME :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

- -

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01 14 .7200E+01 15 .7200E+01 16 .7200E+01
17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

FF *** AERMOD - VERSION 22112 *** *** Valor Elementary Exposure To DPM From I-405 *** 12/13/22
*** AERMET - VERSION 16216 ***
*** ***
17:15:37

*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0734 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 22112 *** *** Valor Elementary Exposure To DPM From I-405 *** 12/13/22

*** AERMET - VERSION 16216 ***

*** ***

17:15:37

*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0735 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00

```
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                         ***        12/13/22
 *** AERMET - VERSION  16216 ***                                                                            ***        17:15:37

                               PAGE  17
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = 405N0736     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                         ***        12/13/22
 *** AERMET - VERSION  16216 ***                                                                            ***        17:15:37

                               PAGE  18
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = 405N0737     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
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                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***
 17:15:37

                               PAGE  19
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405N0738     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
   .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***
 17:15:37

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 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405N0739     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
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 SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14  .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                              ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                                      ***
 17:15:37

                              PAGE  21
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = 405N0740     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14  .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                              ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                                      ***
```

*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0741 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 22112 *** *** Valor Elementary Exposure To DPM From I-405 *** 12/13/22

*** AERMET - VERSION 16216 ***

*** ***

*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0742 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

```
1604       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1605       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1606      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1607   FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
       I-405                         ***        12/13/22
1608    *** AERMET - VERSION  16216 ***
        ***                                                                    ***
        17:15:37
1609
                                    PAGE  24
1610    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1611
1612                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1613
1614    SOURCE ID = 405N0743     ; SOURCE TYPE = VOLUME   :
1615     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1616    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1617                                                DAY OF WEEK = WEEKDAY
1618       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
1619       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
1620      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1621                                                DAY OF WEEK = SATURDAY
1622       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1623       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1624      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1625                                                DAY OF WEEK = SUNDAY
1626       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1627       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1628      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1629   FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
       I-405                         ***        12/13/22
1630    *** AERMET - VERSION  16216 ***
        ***                                                                    ***
        17:15:37
1631
                                    PAGE  25
1632    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1633
1634                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1635
1636    SOURCE ID = 405N0744     ; SOURCE TYPE = VOLUME   :
1637     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1638    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1639                                                DAY OF WEEK = WEEKDAY
1640       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
1641       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
```

```
1642      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1643                                              DAY OF WEEK = SATURDAY
1644       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1645       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1646      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1647                                              DAY OF WEEK = SUNDAY
1648       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1649       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1650      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1651  FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
      I-405                          ***        12/13/22
1652   *** AERMET - VERSION  16216 ***
       ***                                                                    ***
       17:15:37
1653
                                  PAGE  26
1654   *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1655
1656                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1657
1658   SOURCE ID = 405N0745     ; SOURCE TYPE = VOLUME   :
1659    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1660   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1661                                              DAY OF WEEK = WEEKDAY
1662       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .7200E+01
1663       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
          .7200E+01   15  .7200E+01   16  .7200E+01
1664      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1665                                              DAY OF WEEK = SATURDAY
1666       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1667       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1668      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1669                                              DAY OF WEEK = SUNDAY
1670       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1671       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1672      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1673  FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
      I-405                          ***        12/13/22
1674   *** AERMET - VERSION  16216 ***
       ***                                                                    ***
       17:15:37
1675
                                  PAGE  27
1676   *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1677
1678                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1679
```

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 SOURCE ID = 405N0746     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
    .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                         ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***
 17:15:37

                              PAGE  28
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405N0747     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
    .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                         ***        12/13/22
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1718    *** AERMET - VERSION  16216 ***
        ***                                                                    ***
        17:15:37
1719
                                    PAGE  29
1720    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1721
1722                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1723
1724    SOURCE ID = 405N0748     ; SOURCE TYPE = VOLUME   :
1725     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1726    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1727                                                DAY OF WEEK = WEEKDAY
1728       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
1729       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
1730      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1731                                                DAY OF WEEK = SATURDAY
1732       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1733       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1734      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1735                                                DAY OF WEEK = SUNDAY
1736       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1737       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1738      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1739    FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
        I-405                        ***        12/13/22
1740     *** AERMET - VERSION  16216 ***
         ***                                                                   ***
         17:15:37
1741
                                    PAGE  30
1742    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1743
1744                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1745
1746     SOURCE ID = 405N0749     ; SOURCE TYPE = VOLUME   :
1747     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1748    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1749                                                DAY OF WEEK = WEEKDAY
1750       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
1751       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
1752      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1753                                                DAY OF WEEK = SATURDAY
1754       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1755       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1756      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
```

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00

17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0750 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .7200E+01

9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01 14 .7200E+01 15 .7200E+01 16 .7200E+01

17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00

17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00

17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0751 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .7200E+01

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    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                            DAY OF WEEK = SATURDAY
    1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                            DAY OF WEEK = SUNDAY
    1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                    ***       12/13/22
 *** AERMET - VERSION  16216 ***                                                                          ***       17:15:37

                              PAGE  33
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = 405N0752     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
    1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                            DAY OF WEEK = SATURDAY
    1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                            DAY OF WEEK = SUNDAY
    1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                    ***       12/13/22
 *** AERMET - VERSION  16216 ***                                                                          ***       17:15:37

                              PAGE  34
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
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                    WEEK (HRDOW) *
1833
1834    SOURCE ID = 405N0753     ; SOURCE TYPE = VOLUME   :
1835     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1836    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1837                                                DAY OF WEEK = WEEKDAY
1838       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
1839       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
1840      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1841                                                DAY OF WEEK = SATURDAY
1842       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1843       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1844      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1845                                                DAY OF WEEK = SUNDAY
1846       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1847       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1848      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1849    FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
        I-405                          ***        12/13/22
1850     *** AERMET - VERSION  16216 ***
         ***                                                                    ***
         17:15:37
1851
                                  PAGE  35
1852    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1853
1854                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1855
1856    SOURCE ID = 405N0754     ; SOURCE TYPE = VOLUME   :
1857     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1858    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1859                                                DAY OF WEEK = WEEKDAY
1860       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
1861       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
1862      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1863                                                DAY OF WEEK = SATURDAY
1864       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1865       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1866      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1867                                                DAY OF WEEK = SUNDAY
1868       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1869       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1870      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0755 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0756 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14					

```
      .0000E+00   15  .0000E+00   16  .0000E+00
1910    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1911                                          DAY OF WEEK = SUNDAY
1912     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
1913     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
1914    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1915 FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
     I-405                        ***        12/13/22
1916  *** AERMET - VERSION  16216 ***
      ***                                                                  ***
      17:15:37
1917
                                PAGE  38
1918  *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1919
1920                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1921
1922  SOURCE ID = 405N0757     ; SOURCE TYPE = VOLUME   :
1923   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1924  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1925                                          DAY OF WEEK = WEEKDAY
1926     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .7200E+01
1927     9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
      .7200E+01   15  .7200E+01   16  .7200E+01
1928    17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1929                                          DAY OF WEEK = SATURDAY
1930     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
1931     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
1932    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1933                                          DAY OF WEEK = SUNDAY
1934     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
1935     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
1936    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1937 FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
     I-405                        ***        12/13/22
1938  *** AERMET - VERSION  16216 ***
      ***                                                                  ***
      17:15:37
1939
                                PAGE  39
1940  *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
1941
1942                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1943
1944  SOURCE ID = 405N0758     ; SOURCE TYPE = VOLUME   :
1945   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1946  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1947                                          DAY OF WEEK = WEEKDAY
```

```
    1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                    ***        12/13/22
 *** AERMET - VERSION  16216 ***   ***                                                                           ***        17:15:37

                                   PAGE  40
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = 405N0759     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = WEEKDAY
    1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .7200E+01
    9 .7200E+01   10 .7200E+01   11 .7200E+01   12 .7200E+01   13 .7200E+01   14 .7200E+01   15 .7200E+01   16 .7200E+01
   17 .7200E+01   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                  DAY OF WEEK = SUNDAY
    1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00    5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00   14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00   22 .0000E+00   23 .0000E+00   24 .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                    ***        12/13/22
 *** AERMET - VERSION  16216 ***   ***                                                                           ***        17:15:37

                                   PAGE  41
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
```

```
1985
1986                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1987
1988    SOURCE ID = 405N0760     ; SOURCE TYPE = VOLUME   :
1989     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1990    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1991                                                DAY OF WEEK = WEEKDAY
1992       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
1993       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
1994      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1995                                                DAY OF WEEK = SATURDAY
1996       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1997       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1998      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1999                                                DAY OF WEEK = SUNDAY
2000       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2001       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2002      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2003    FE *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
        I-405                          ***        12/13/22
2004     *** AERMET - VERSION  16216 ***
         ***                                                                    ***
         17:15:37
2005
                                  PAGE  42
2006    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
2007
2008                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2009
2010    SOURCE ID = 405N0761     ; SOURCE TYPE = VOLUME   :
2011     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2012    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2013                                                DAY OF WEEK = WEEKDAY
2014       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
2015       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
2016      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2017                                                DAY OF WEEK = SATURDAY
2018       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2019       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2020      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2021                                                DAY OF WEEK = SUNDAY
2022       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2023       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
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*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0762 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

*** AERMOD - VERSION 22112 *** *** Valor Elementary Exposure To DPM From I-405 *** 12/13/22
*** AERMET - VERSION 16216 ***
*** ***
17:15:37

*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0763 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6					

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      .0000E+00    7  .0000E+00    8  .0000E+00
2063   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
2064  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
2065                                          DAY OF WEEK = SUNDAY
2066   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
2067   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
2068  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
2069 FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
     I-405                        ***        12/13/22
2070  *** AERMET - VERSION  16216 ***
      ***                                                                    ***
      17:15:37
2071
                                PAGE  45
2072  *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
2073
2074                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2075
2076  SOURCE ID = 405N0764     ; SOURCE TYPE = VOLUME   :
2077   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
2078  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
2079                                          DAY OF WEEK = WEEKDAY
2080   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .7200E+01
2081   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
       .7200E+01   15  .7200E+01   16  .7200E+01
2082  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
2083                                          DAY OF WEEK = SATURDAY
2084   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
2085   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
2086  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
2087                                          DAY OF WEEK = SUNDAY
2088   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
2089   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
2090  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
2091 FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
     I-405                        ***        12/13/22
2092  *** AERMET - VERSION  16216 ***
      ***                                                                    ***
      17:15:37
2093
                                PAGE  46
2094  *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
2095
2096                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2097
2098  SOURCE ID = 405N0765     ; SOURCE TYPE = VOLUME   :
2099   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
2100  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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- - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
   .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                         ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***
 17:15:37

                             PAGE  47
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

 SOURCE ID = 405N0766     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
   .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                         ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***
 17:15:37
```

*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405N0767 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.7200E+01	9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01
15	.7200E+01	16	.7200E+01	17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00								

FF *** AERMOD - VERSION 22112 *** *** Valor Elementary Exposure To DPM From I-405 *** 12/13/22

*** AERMET - VERSION 16216 ***

*** ***

17:15:37

*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0676 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.7200E+01	9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01
15	.7200E+01	16	.7200E+01	17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00												

```
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                         ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***
 17:15:37

                               PAGE  50
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405S0677     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                             DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .7200E+01
      9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
     .7200E+01   15  .7200E+01   16  .7200E+01
     17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                         ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***
 17:15:37

                               PAGE  51
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405S0678     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

                                             DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .7200E+01
      9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
     .7200E+01   15  .7200E+01   16  .7200E+01
     17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
```

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                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        17:15:37

                             PAGE  52
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = 405S0679     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14  .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        17:15:37

                             PAGE  53
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = 405S0680     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
   .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                         ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***
 17:15:37

                              PAGE  54
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

 SOURCE ID = 405S0681     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
   .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                         ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                         ***
```

*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0682 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 22112 *** *** Valor Elementary Exposure To DPM From I-405 *** 12/13/22

*** AERMET - VERSION 16216 ***

*** ***

*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0683 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0684 ; SOURCE TYPE = VOLUME :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01 14 .7200E+01 15 .7200E+01 16 .7200E+01
17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0685 ; SOURCE TYPE = VOLUME :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .7200E+01
9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01 14 .7200E+01 15 .7200E+01 16 .7200E+01

```
2368      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2369                                                DAY OF WEEK = SATURDAY
2370       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2371       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
2372      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2373                                                DAY OF WEEK = SUNDAY
2374       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2375       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
2376      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2377  FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
      I-405                          ***        12/13/22
2378   *** AERMET - VERSION  16216 ***
       ***                                                                    ***
       17:15:37
2379
                                  PAGE  59
2380   *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
2381
2382                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2383
2384   SOURCE ID = 405S0686     ; SOURCE TYPE = VOLUME   :
2385    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
2386  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
2387                                                DAY OF WEEK = WEEKDAY
2388       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .7200E+01
2389       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
          .7200E+01   15  .7200E+01   16  .7200E+01
2390      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2391                                                DAY OF WEEK = SATURDAY
2392       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2393       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
2394      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2395                                                DAY OF WEEK = SUNDAY
2396       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2397       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
2398      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2399  FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
      I-405                          ***        12/13/22
2400   *** AERMET - VERSION  16216 ***
       ***                                                                    ***
       17:15:37
2401
                                  PAGE  60
2402   *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
2403
2404                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2405
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 SOURCE ID = 405S0687     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
    .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                         ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***
 17:15:37

                              PAGE  61
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405S0688     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
    .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                         ***        12/13/22
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0689   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0690   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00

17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0691 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .7200E+01

9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01 14 .7200E+01 15 .7200E+01 16 .7200E+01

17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00

17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00

17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0692 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .7200E+01

```
      9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
      .7200E+01   15  .7200E+01   16  .7200E+01
     17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***
 17:15:37

                                PAGE  66
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405S0693     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .7200E+01
      9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
      .7200E+01   15  .7200E+01   16  .7200E+01
     17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***
 17:15:37

                                PAGE  67
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
```

```
                    WEEK (HRDOW) *
2559
2560   SOURCE ID = 405S0694     ; SOURCE TYPE = VOLUME   :
2561    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
2562   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
2563                                                DAY OF WEEK = WEEKDAY
2564      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .7200E+01
2565      9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
          .7200E+01   15  .7200E+01   16  .7200E+01
2566     17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2567                                                DAY OF WEEK = SATURDAY
2568      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2569      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
2570     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2571                                                DAY OF WEEK = SUNDAY
2572      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2573      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
2574     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2575   FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
       I-405                          ***        12/13/22
2576    *** AERMET - VERSION  16216 ***
        ***                                                                    ***
        17:15:37
2577
                                  PAGE  68
2578    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
2579
2580                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2581
2582   SOURCE ID = 405S0695     ; SOURCE TYPE = VOLUME   :
2583    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
2584   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
2585                                                DAY OF WEEK = WEEKDAY
2586      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .7200E+01
2587      9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
          .7200E+01   15  .7200E+01   16  .7200E+01
2588     17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2589                                                DAY OF WEEK = SATURDAY
2590      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2591      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
2592     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2593                                                DAY OF WEEK = SUNDAY
2594      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2595      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
2596     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0696 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0697 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14					

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0698 ; SOURCE TYPE = VOLUME :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .7200E+01

9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01 14 .7200E+01 15 .7200E+01 16 .7200E+01

17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00

17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00

17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0699 ; SOURCE TYPE = VOLUME :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

DAY OF WEEK = WEEKDAY

```
2674       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
2675       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
2676      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2677                                              DAY OF WEEK = SATURDAY
2678       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2679       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2680      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2681                                              DAY OF WEEK = SUNDAY
2682       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2683       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2684      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2685 FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
     I-405                        ***        12/13/22
2686  *** AERMET - VERSION  16216 ***
      ***                                                                    ***
      17:15:37
2687
                                  PAGE  73
2688  *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
2689
2690                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                       WEEK (HRDOW) *
2691
2692  SOURCE ID = 405S0700     ; SOURCE TYPE = VOLUME   :
2693   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
2694  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - - - - - -
2695                                              DAY OF WEEK = WEEKDAY
2696       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
2697       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
2698      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2699                                              DAY OF WEEK = SATURDAY
2700       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2701       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2702      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2703                                              DAY OF WEEK = SUNDAY
2704       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2705       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2706      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2707 FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
     I-405                        ***        12/13/22
2708  *** AERMET - VERSION  16216 ***
      ***                                                                    ***
      17:15:37
2709
                                  PAGE  74
2710  *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
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                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = 405S0701     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                    ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                          ***
 17:15:37

                               PAGE  75
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = 405S0702     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14  .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***
 17:15:37

                                PAGE  76
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405S0703     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
    .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***
 17:15:37

                                PAGE  77
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405S0704     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .7200E+01
    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
    .7200E+01   15  .7200E+01   16  .7200E+01
   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
2789    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2790   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2791                                          DAY OF WEEK = SUNDAY
2792    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2793    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2794   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2795 FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
     I-405                        ***        12/13/22
2796  *** AERMET - VERSION  16216 ***
      ***                                                                    ***
      17:15:37
2797
                                PAGE  78
2798  *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
2799
2800                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2801
2802  SOURCE ID = 405S0705     ; SOURCE TYPE = VOLUME   :
2803   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
2804  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
2805                                          DAY OF WEEK = WEEKDAY
2806    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .7200E+01
2807    9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
      .7200E+01   15  .7200E+01   16  .7200E+01
2808   17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2809                                          DAY OF WEEK = SATURDAY
2810    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2811    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2812   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2813                                          DAY OF WEEK = SUNDAY
2814    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2815    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2816   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2817 FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
     I-405                        ***        12/13/22
2818  *** AERMET - VERSION  16216 ***
      ***                                                                    ***
      17:15:37
2819
                                PAGE  79
2820  *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
2821
2822                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2823
2824  SOURCE ID = 405S0706     ; SOURCE TYPE = VOLUME   :
2825   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
2826  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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 - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14  .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                        ***        12/13/22
 *** AERMET - VERSION  16216 ***                                                                    ***         17:15:37

                                PAGE  80
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = 405S0707     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14  .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                        ***        12/13/22
 *** AERMET - VERSION  16216 ***                                                                    ***         17:15:37
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*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0708 ; SOURCE TYPE = VOLUME :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .7200E+01

9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01 14 .7200E+01 15 .7200E+01 16 .7200E+01

17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00

17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00

17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

FF *** AERMOD - VERSION 22112 *** *** Valor Elementary Exposure To DPM From I-405 *** 12/13/22

*** AERMET - VERSION 16216 ***

*** ***

17:15:37

*** MODELOPTs: NonDFAULT CONC FLAT NODRYDPLT NOWETDPLT RURAL NoUrbTran ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0709 ; SOURCE TYPE = VOLUME :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

DAY OF WEEK = WEEKDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .7200E+01

9 .7200E+01 10 .7200E+01 11 .7200E+01 12 .7200E+01 13 .7200E+01 14 .7200E+01 15 .7200E+01 16 .7200E+01

17 .7200E+01 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00

17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00

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2903       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2904      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2905   FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
       I-405                        ***        12/13/22
2906    *** AERMET - VERSION  16216 ***
        ***                                                                    ***
        17:15:37
2907
                                    PAGE  83
2908    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
2909
2910                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
2911
2912    SOURCE ID = 405S0710     ; SOURCE TYPE = VOLUME   :
2913     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2914    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2915                                                DAY OF WEEK = WEEKDAY
2916       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
2917       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
2918      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2919                                                DAY OF WEEK = SATURDAY
2920       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2921       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2922      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2923                                                DAY OF WEEK = SUNDAY
2924       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2925       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2926      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2927   FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
       I-405                        ***        12/13/22
2928    *** AERMET - VERSION  16216 ***
        ***                                                                    ***
        17:15:37
2929
                                    PAGE  84
2930    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
2931
2932                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
2933
2934    SOURCE ID = 405S0711     ; SOURCE TYPE = VOLUME   :
2935     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2936    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2937                                                DAY OF WEEK = WEEKDAY
2938       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .7200E+01
2939       9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
           .7200E+01   15  .7200E+01   16  .7200E+01
2940      17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
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                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***
 17:15:37

                               PAGE  85
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405S0712     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
   .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                      ***
 17:15:37

                               PAGE  86
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = 405S0713     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
   .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                            ***
 17:15:37

                              PAGE  87
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

 SOURCE ID = 405S0714     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14
   .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                            ***
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0715 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 405S0716 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.7200E+01
9	.7200E+01	10	.7200E+01	11	.7200E+01	12	.7200E+01	13	.7200E+01	14	.7200E+01	15	.7200E+01	16	.7200E+01
17	.7200E+01	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

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   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                     ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        17:15:37

                             PAGE  90
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

 SOURCE ID = 405S0717     ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .7200E+01
   9  .7200E+01   10  .7200E+01   11  .7200E+01   12  .7200E+01   13  .7200E+01   14  .7200E+01   15  .7200E+01   16  .7200E+01
  17  .7200E+01   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                     ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        17:15:37

                             PAGE  91
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                                            *** DISCRETE CARTESIAN RECEPTORS ***
                                          (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

    ( 364522.0, 3789971.0,     235.0,     235.0,       0.0);         ( 364522.0, 3789971.0,     235.0,     235.0,       0.0);
    ( 364523.0, 3789983.0,     235.0,     235.0,       0.0);         ( 364523.0, 3789983.0,     235.0,     235.0,       0.0);
    ( 364523.0, 3789994.0,     235.0,     235.0,       0.0);         ( 364523.0, 3789994.0,     235.0,     235.0,       0.0);
    ( 364523.0, 3790003.0,     235.0,     235.0,       0.0);         ( 364523.0, 3790003.0,     235.0,     235.0,       0.0);
    ( 364540.0, 3789994.0,     235.0,     235.0,       0.0);         ( 364523.0,
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                3790020.0,     235.0,     235.0,       0.0);
3095        ( 364523.0, 3790028.0,     235.0,     235.0,       0.0);         ( 364523.0,
                3790036.0,     235.0,     235.0,       0.0);
3096        ( 364539.0, 3790025.0,     235.0,     235.0,       0.0);         ( 364539.0,
                3790035.0,     235.0,     235.0,       0.0);
3097        ( 364565.0, 3790035.0,     235.0,     235.0,       0.0);         ( 364570.0,
                3790003.0,     235.0,     235.0,       0.0);
3098        ( 364566.0, 3789991.0,     235.0,     235.0,       0.0);         ( 364565.0,
                3789968.0,     235.0,     235.0,       0.0);
3099        ( 364546.0, 3789974.0,     235.0,     235.0,       0.0);         ( 364546.0,
                3789974.0,     235.0,     235.0,       0.0);
3100        ( 364524.0, 3790013.0,     235.0,     235.0,       0.0);         ( 364524.0,
                3790013.0,     235.0,     235.0,       0.0);
3101        ( 364551.0, 3790013.0,     235.0,     235.0,       0.0);         ( 364551.0,
                3790013.0,     235.0,     235.0,       0.0);
3102        ( 364484.7, 3789924.9,     235.0,     235.0,       0.0);         ( 364494.7,
                3789924.9,     235.0,     235.0,       0.0);
3103        ( 364504.7, 3789924.9,     235.0,     235.0,       0.0);         ( 364514.7,
                3789924.9,     235.0,     235.0,       0.0);
3104        ( 364524.7, 3789924.9,     235.0,     235.0,       0.0);         ( 364534.7,
                3789924.9,     235.0,     235.0,       0.0);
3105        ( 364544.7, 3789924.9,     235.0,     235.0,       0.0);         ( 364554.7,
                3789924.9,     235.0,     235.0,       0.0);
3106        ( 364564.7, 3789924.9,     235.0,     235.0,       0.0);         ( 364574.7,
                3789924.9,     235.0,     235.0,       0.0);
3107        ( 364484.7, 3789939.9,     235.0,     235.0,       0.0);         ( 364494.7,
                3789939.9,     235.0,     235.0,       0.0);
3108        ( 364504.7, 3789939.9,     235.0,     235.0,       0.0);         ( 364514.7,
                3789939.9,     235.0,     235.0,       0.0);
3109        ( 364524.7, 3789939.9,     235.0,     235.0,       0.0);         ( 364534.7,
                3789939.9,     235.0,     235.0,       0.0);
3110        ( 364544.7, 3789939.9,     235.0,     235.0,       0.0);         ( 364554.7,
                3789939.9,     235.0,     235.0,       0.0);
3111        ( 364564.7, 3789939.9,     235.0,     235.0,       0.0);         ( 364574.7,
                3789939.9,     235.0,     235.0,       0.0);
3112        ( 364484.7, 3789954.9,     235.0,     235.0,       0.0);         ( 364494.7,
                3789954.9,     235.0,     235.0,       0.0);
3113        ( 364504.7, 3789954.9,     235.0,     235.0,       0.0);         ( 364514.7,
                3789954.9,     235.0,     235.0,       0.0);
3114        ( 364524.7, 3789954.9,     235.0,     235.0,       0.0);         ( 364534.7,
                3789954.9,     235.0,     235.0,       0.0);
3115        ( 364544.7, 3789954.9,     235.0,     235.0,       0.0);         ( 364554.7,
                3789954.9,     235.0,     235.0,       0.0);
3116        ( 364564.7, 3789954.9,     235.0,     235.0,       0.0);         ( 364574.7,
                3789954.9,     235.0,     235.0,       0.0);
3117        ( 364484.7, 3789969.9,     235.0,     235.0,       0.0);         ( 364494.7,
                3789969.9,     235.0,     235.0,       0.0);
3118        ( 364504.7, 3789969.9,     235.0,     235.0,       0.0);         ( 364514.7,
                3789969.9,     235.0,     235.0,       0.0);
3119        ( 364524.7, 3789969.9,     235.0,     235.0,       0.0);         ( 364534.7,
                3789969.9,     235.0,     235.0,       0.0);
3120        ( 364544.7, 3789969.9,     235.0,     235.0,       0.0);         ( 364554.7,
                3789969.9,     235.0,     235.0,       0.0);
3121        ( 364564.7, 3789969.9,     235.0,     235.0,       0.0);         ( 364574.7,
                3789969.9,     235.0,     235.0,       0.0);
3122        ( 364484.7, 3789984.9,     235.0,     235.0,       0.0);         ( 364494.7,
                3789984.9,     235.0,     235.0,       0.0);
3123        ( 364504.7, 3789984.9,     235.0,     235.0,       0.0);         ( 364514.7,
                3789984.9,     235.0,     235.0,       0.0);
3124        ( 364524.7, 3789984.9,     235.0,     235.0,       0.0);         ( 364534.7,
                3789984.9,     235.0,     235.0,       0.0);
3125        ( 364544.7, 3789984.9,     235.0,     235.0,       0.0);         ( 364554.7,
                3789984.9,     235.0,     235.0,       0.0);
3126        ( 364564.7, 3789984.9,     235.0,     235.0,       0.0);         ( 364574.7,
                3789984.9,     235.0,     235.0,       0.0);
3127        ( 364484.7, 3789999.9,     235.0,     235.0,       0.0);         ( 364494.7,
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     3789999.9,     235.0,     235.0,       0.0);
3128     ( 364504.7, 3789999.9,     235.0,     235.0,       0.0);         ( 364514.7,
     3789999.9,     235.0,     235.0,       0.0);
3129     ( 364524.7, 3789999.9,     235.0,     235.0,       0.0);         ( 364534.7,
     3789999.9,     235.0,     235.0,       0.0);
3130     ( 364544.7, 3789999.9,     235.0,     235.0,       0.0);         ( 364554.7,
     3789999.9,     235.0,     235.0,       0.0);
3131     ( 364564.7, 3789999.9,     235.0,     235.0,       0.0);         ( 364574.7,
     3789999.9,     235.0,     235.0,       0.0);
3132     ( 364484.7, 3790014.9,     235.0,     235.0,       0.0);         ( 364494.7,
     3790014.9,     235.0,     235.0,       0.0);
3133     ( 364504.7, 3790014.9,     235.0,     235.0,       0.0);         ( 364514.7,
     3790014.9,     235.0,     235.0,       0.0);
3134     ( 364524.7, 3790014.9,     235.0,     235.0,       0.0);         ( 364534.7,
     3790014.9,     235.0,     235.0,       0.0);
3135 FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
     I-405                         ***        12/13/22
3136  *** AERMET - VERSION  16216 ***
      ***                                                                    ***
      17:15:37
3137
3138  *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
3139
3140                                              *** DISCRETE CARTESIAN RECEPTORS ***
3141                                            (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
3142                                                        (METERS)
3143
3144     ( 364544.7, 3790014.9,     235.0,     235.0,       0.0);         ( 364554.7,
     3790014.9,     235.0,     235.0,       0.0);
3145     ( 364564.7, 3790014.9,     235.0,     235.0,       0.0);         ( 364574.7,
     3790014.9,     235.0,     235.0,       0.0);
3146     ( 364484.7, 3790029.9,     235.0,     235.0,       0.0);         ( 364494.7,
     3790029.9,     235.0,     235.0,       0.0);
3147     ( 364504.7, 3790029.9,     235.0,     235.0,       0.0);         ( 364514.7,
     3790029.9,     235.0,     235.0,       0.0);
3148     ( 364524.7, 3790029.9,     235.0,     235.0,       0.0);         ( 364534.7,
     3790029.9,     235.0,     235.0,       0.0);
3149     ( 364544.7, 3790029.9,     235.0,     235.0,       0.0);         ( 364554.7,
     3790029.9,     235.0,     235.0,       0.0);
3150     ( 364564.7, 3790029.9,     235.0,     235.0,       0.0);         ( 364574.7,
     3790029.9,     235.0,     235.0,       0.0);
3151     ( 364484.7, 3790044.9,     235.0,     235.0,       0.0);         ( 364494.7,
     3790044.9,     235.0,     235.0,       0.0);
3152     ( 364504.7, 3790044.9,     235.0,     235.0,       0.0);         ( 364514.7,
     3790044.9,     235.0,     235.0,       0.0);
3153     ( 364524.7, 3790044.9,     235.0,     235.0,       0.0);         ( 364534.7,
     3790044.9,     235.0,     235.0,       0.0);
3154     ( 364544.7, 3790044.9,     235.0,     235.0,       0.0);         ( 364554.7,
     3790044.9,     235.0,     235.0,       0.0);
3155     ( 364564.7, 3790044.9,     235.0,     235.0,       0.0);         ( 364574.7,
     3790044.9,     235.0,     235.0,       0.0);
3156     ( 364484.7, 3790059.9,     235.0,     235.0,       0.0);         ( 364494.7,
     3790059.9,     235.0,     235.0,       0.0);
3157     ( 364504.7, 3790059.9,     235.0,     235.0,       0.0);         ( 364514.7,
     3790059.9,     235.0,     235.0,       0.0);
3158     ( 364524.7, 3790059.9,     235.0,     235.0,       0.0);         ( 364534.7,
     3790059.9,     235.0,     235.0,       0.0);
3159     ( 364544.7, 3790059.9,     235.0,     235.0,       0.0);         ( 364554.7,
     3790059.9,     235.0,     235.0,       0.0);
3160     ( 364564.7, 3790059.9,     235.0,     235.0,       0.0);         ( 364574.7,
     3790059.9,     235.0,     235.0,       0.0);
3161 FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
     I-405                         ***        12/13/22
3162  *** AERMET - VERSION  16216 ***
      ***                                                                    ***
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17:15:37

                              PAGE  93
*** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                                            *** METEOROLOGICAL DAYS SELECTED FOR
                                            PROCESSING ***
                                                                  (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
           1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1

               NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
               IS INCLUDED IN THE DATA FILE.



                                 *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                 CATEGORIES ***
                                                               (METERS/SEC)

                                                1.54,   3.09,   5.14,   8.23,  10.80,
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                        ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***
 17:15:37

                              PAGE  94
*** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                                   *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
                                   ***

  Surface file:
  C:\Users\jclar\OneDrive\CLARKA~1\PR3138~1\KVNY_V~1\KVNY_V9.SFC
  Met Version:  16216
  Profile file:
  C:\Users\jclar\OneDrive\CLARKA~1\PR3138~1\KVNY_V~1\KVNY_V9.PFL
  Surface format:
  FREE

  Profile format:
  FREE

  Surface station no.:    23130                 Upper air station no.:     3190
                 Name: UNKNOWN                                  Name:
                 UNKNOWN
                 Year:   2012                                   Year:   2012

First 24 hours of scalar data
YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
REF WS   WD     HT  REF TA     HT
```

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- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 12 01 01   1 01  -10.8  0.139 -9.000 -9.000 -999.  124.     21.9  0.11   2.64   1.00   1.59  293.    7.9  285.9    2.0
 12 01 01   1 02   -4.5  0.089 -9.000 -9.000 -999.   64.     13.7  0.11   2.64   1.00   1.04  249.    7.9  284.2    2.0
 12 01 01   1 03   -5.2  0.095 -9.000 -9.000 -999.   70.     14.5  0.11   2.64   1.00   1.11  239.    7.9  282.0    2.0
 12 01 01   1 04   -6.4  0.105 -9.000 -9.000 -999.   82.     16.1  0.11   2.64   1.00   1.23  254.    7.9  283.1    2.0
 12 01 01   1 05   -3.2  0.076 -9.000 -9.000 -999.   50.     12.0  0.11   2.64   1.00   0.86  267.    7.9  283.1    2.0
 12 01 01   1 06   -2.6  0.070 -9.000 -9.000 -999.   44.     11.6  0.11   2.64   1.00   0.75  311.    7.9  282.5    2.0
 12 01 01   1 07   -4.6  0.089 -9.000 -9.000 -999.   64.     13.6  0.11   2.64   1.00   1.04  293.    7.9  283.8    2.0
 12 01 01   1 08   -2.7  0.073 -9.000 -9.000 -999.   47.     12.5  0.11   2.64   0.56   0.84  259.    7.9  282.5    2.0
 12 01 01   1 09   34.4  0.139  0.330  0.009   37.  124.     -6.9  0.11   2.64   0.32   1.09  253.    7.9  288.8    2.0
 12 01 01   1 10  117.4  0.405  0.751  0.005  128.  618.    -50.0  0.11   2.64   0.24   3.91  339.    7.9  295.4    2.0
 12 01 01   1 11  167.5  0.576  1.211  0.005  376. 1050.   -101.3  0.11   2.64   0.21   5.79  353.    7.9  297.0    2.0
 12 01 01   1 12  192.7  0.638  1.547  0.005  681. 1220.   -119.0  0.11   2.64   0.20   6.45  354.    7.9  298.1    2.0
 12 01 01   1 13  192.6  0.554  1.851  0.005 1167.  999.    -78.2  0.11   2.64   0.20   5.50  354.    7.9  299.2    2.0
 12 01 01   1 14  166.1  0.611  1.897  0.005 1456. 1146.   -121.6  0.11   2.64   0.21   6.19  356.    7.9  299.2    2.0
 12 01 01   1 15  114.3  0.610  1.719  0.005 1573. 1145.   -175.8  0.11   2.64   0.25   6.26  354.    7.9  298.1    2.0
 12 01 01   1 16   42.7  0.619  1.249  0.005 1611. 1167.   -489.4  0.11   2.64   0.33   6.48  354.    7.9  297.0    2.0
 12 01 01   1 17  -46.6  0.603 -9.000 -9.000 -999. 1125.    416.0  0.11   2.64   0.59   6.41  359.    7.9  294.9    2.0
 12 01 01   1 18  -55.7  0.590 -9.000 -9.000 -999. 1090.    383.5  0.11   2.64   1.00   6.30    3.    7.9  294.2    2.0
 12 01 01   1 19  -35.3  0.375 -9.000 -9.000 -999.  595.    154.3  0.11   2.64   1.00   4.07  344.    7.9  294.2    2.0
 12 01 01   1 20   -3.2  0.076 -9.000 -9.000 -999.  269.     12.1  0.11   2.64   1.00   0.86  278.    7.9  289.9    2.0
 12 01 01   1 21   -7.9  0.118 -9.000 -9.000 -999.  105.     18.5  0.11   2.64   1.00   1.37  294.    7.9  290.9    2.0
 12 01 01   1 22  -19.6  0.204 -9.000 -9.000 -999.  220.     45.6  0.11   2.64   1.00   2.27  307.    7.9  288.8    2.0
 12 01 01   1 23  -10.3  0.135 -9.000 -9.000 -999.  121.     21.3  0.11   2.64   1.00   1.55  308.    7.9  287.5    2.0
 12 01 01   1 24  -11.3  0.142 -9.000 -9.000 -999.  128.     22.4  0.11   2.64   1.00   1.62  290.    7.9  287.5    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01    7.9 1  293.    1.59   286.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405                         ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                        ***        17:15:37

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 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

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*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: I-405N ***

INCLUDING SOURCE(S): 405N0726 , 405N0727 , 405N0728 , 405N0729 , 405N0730 , 405N0731 , 405N0732 , 405N0733 , 405N0734 , 405N0735 , 405N0736 , 405N0737 , 405N0738 , 405N0739 , 405N0740 , 405N0741 , 405N0742 , 405N0743 , 405N0744 , 405N0745 , 405N0746 , 405N0747 , 405N0748 , 405N0749 , 405N0750 , 405N0751 , 405N0752 , 405N0753 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
364522.00	3789971.00	5.51729	364522.00	3789971.00	5.51729
364523.00	3789983.00	5.48846	364523.00	3789983.00	5.48846
364523.00	3789994.00	5.49789	364523.00	3789994.00	5.49789
364523.00	3790003.00	5.50547	364523.00	3790003.00	5.50547
364540.00	3789994.00	4.89810	364523.00	3790020.00	5.51955
364523.00	3790028.00	5.52612	364523.00	3790036.00	5.53267
364539.00	3790025.00	4.95072	364539.00	3790035.00	4.95729
364565.00	3790035.00	4.22992	364570.00	3790003.00	4.09821
364566.00	3789991.00	4.18529	364565.00	3789968.00	4.19748
364546.00	3789974.00	4.70209	364546.00	3789974.00	4.70209
364524.00	3790013.00	5.47451	364524.00	3790013.00	5.47451
364551.00	3790013.00	4.58250	364551.00	3790013.00	4.58250
364484.70	3789924.90	7.41402	364494.70	3789924.90	6.77693
364504.70	3789924.90	6.23675	364514.70	3789924.90	5.77302
364524.70	3789924.90	5.37054	364534.70	3789924.90	5.01791
364544.70	3789924.90	4.70642	364554.70	3789924.90	4.42930
364564.70	3789924.90	4.18115	364574.70	3789924.90	3.95766
364484.70	3789939.90	7.44045	364494.70	3789939.90	6.79911
364504.70	3789939.90	6.25563	364514.70	3789939.90	5.78928
364524.70	3789939.90	5.38464	364534.70	3789939.90	5.03023
364544.70	3789939.90	4.71724	364554.70	3789939.90	4.43884
364564.70	3789939.90	4.18958	364574.70	3789939.90	3.96515
364484.70	3789954.90	7.46571	364494.70	3789954.90	6.82041

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3275          364504.70    3789954.90        6.27380                        364514.70
              3789954.90         5.80495
3276          364524.70    3789954.90        5.39827                        364534.70
              3789954.90         5.04214
3277          364544.70    3789954.90        4.72769                        364554.70
              3789954.90         4.44805
3278          364564.70    3789954.90        4.19773                        364574.70
              3789954.90         3.97238
3279          364484.70    3789969.90        7.48997                        364494.70
              3789969.90         6.84090
3280          364504.70    3789969.90        6.29133                        364514.70
              3789969.90         5.82007
3281          364524.70    3789969.90        5.41142                        364534.70
              3789969.90         5.05364
3282          364544.70    3789969.90        4.73779                        364554.70
              3789969.90         4.45694
3283          364564.70    3789969.90        4.20559                        364574.70
              3789969.90         3.97933
3284          364484.70    3789984.90        7.51356                        364494.70
              3789984.90         6.86083
3285          364504.70    3789984.90        6.30838                        364514.70
              3789984.90         5.83478
3286          364524.70    3789984.90        5.42420                        364534.70
              3789984.90         5.06481
3287          364544.70    3789984.90        4.74759                        364554.70
              3789984.90         4.46556
3288          364564.70    3789984.90        4.21318                        364574.70
              3789984.90         3.98605
3289          364484.70    3789999.90        7.53641                        364494.70
              3789999.90         6.88018
3290          364504.70    3789999.90        6.32495                        364514.70
              3789999.90         5.84912
3291          364524.70    3789999.90        5.43668                        364534.70
              3789999.90         5.07571
3292  FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
      I-405                      ***        12/13/22
3293   *** AERMET - VERSION  16216 ***
       ***                                                                  ***
       17:15:37
3294
                                  PAGE  96
3295   *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
3296
3297                               *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION   VALUES
                                   FOR SOURCE GROUP: I-405N   ***
3298                                   INCLUDING SOURCE(S):     405N0726    , 405N0727    ,
                                       405N0728    , 405N0729    , 405N0730    ,
3299                  405N0731    , 405N0732    , 405N0733    , 405N0734    , 405N0735    ,
                      405N0736    , 405N0737    , 405N0738    ,
3300                  405N0739    , 405N0740    , 405N0741    , 405N0742    , 405N0743    ,
                      405N0744    , 405N0745    , 405N0746    ,
3301                  405N0747    , 405N0748    , 405N0749    , 405N0750    , 405N0751    ,
                      405N0752    , 405N0753    ,  . . .      ,
3302
3303                                        *** DISCRETE CARTESIAN RECEPTOR POINTS ***
3304
3305                                       ** CONC OF DPM      IN
                                           MICROGRAMS/M**3                          **
3306
3307          X-COORD (M)   Y-COORD (M)        CONC                       X-COORD (M)   Y-COORD
              (M)        CONC
3308   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - -
3309          364544.70    3789999.90        4.75713                        364554.70
              3789999.90         4.47395
3310          364564.70    3789999.90        4.22057                        364574.70
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            3789999.90        3.99256
3311        364484.70    3790014.90        7.55865                        364494.70
            3790014.90        6.89906
3312        364504.70    3790014.90        6.34116                        364514.70
            3790014.90        5.86313
3313        364524.70    3790014.90        5.44887                        364534.70
            3790014.90        5.08637
3314        364544.70    3790014.90        4.76647                        364554.70
            3790014.90        4.48214
3315        364564.70    3790014.90        4.22777                        364574.70
            3790014.90        3.99889
3316        364484.70    3790029.90        7.58077                        364494.70
            3790029.90        6.91780
3317        364504.70    3790029.90        6.35722                        364514.70
            3790029.90        5.87699
3318        364524.70    3790029.90        5.46090                        364534.70
            3790029.90        5.09686
3319        364544.70    3790029.90        4.77565                        364554.70
            3790029.90        4.49018
3320        364564.70    3790029.90        4.23481                        364574.70
            3790029.90        4.00506
3321        364484.70    3790044.90        7.60277                        364494.70
            3790044.90        6.93645
3322        364504.70    3790044.90        6.37319                        364514.70
            3790044.90        5.89078
3323        364524.70    3790044.90        5.47288                        364534.70
            3790044.90        5.10729
3324        364544.70    3790044.90        4.78474                        364554.70
            3790044.90        4.49811
3325        364564.70    3790044.90        4.24173                        364574.70
            3790044.90        4.01110
3326        364484.70    3790059.90        7.62455                        364494.70
            3790059.90        6.95495
3327        364504.70    3790059.90        6.38907                        364514.70
            3790059.90        5.90451
3328        364524.70    3790059.90        5.48480                        364534.70
            3790059.90        5.11767
3329        364544.70    3790059.90        4.79378                        364554.70
            3790059.90        4.50598
3330        364564.70    3790059.90        4.24859                        364574.70
            3790059.90        4.01706
3331   FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
       I-405                         ***        12/13/22
3332    *** AERMET - VERSION  16216 ***
        ***                                                                  ***
        17:15:37
3333
                                    PAGE  97
3334    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
3335
3336                                *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION   VALUES
                                    FOR SOURCE GROUP: I-405S   ***
3337                                    INCLUDING SOURCE(S):     405S0676    , 405S0677    ,
                                        405S0678    , 405S0679    , 405S0680    ,
3338                  405S0681    , 405S0682    , 405S0683    , 405S0684    , 405S0685    ,
                      405S0686    , 405S0687    , 405S0688    ,
3339                  405S0689    , 405S0690    , 405S0691    , 405S0692    , 405S0693    ,
                      405S0694    , 405S0695    , 405S0696    ,
3340                  405S0697    , 405S0698    , 405S0699    , 405S0700    , 405S0701    ,
                      405S0702    , 405S0703    ,  . . .      ,
3341
3342                                        *** DISCRETE CARTESIAN RECEPTOR POINTS ***
3343
3344                                     ** CONC OF DPM      IN
                                         MICROGRAMS/M**3                          **
3345
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X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
364522.00	3789971.00	4.85673	364522.00	3789971.00	4.85673
364523.00	3789983.00	4.83387	364523.00	3789983.00	4.83387
364523.00	3789994.00	4.84125	364523.00	3789994.00	4.84125
364523.00	3790003.00	4.84727	364523.00	3790003.00	4.84727
364540.00	3789994.00	4.36363	364523.00	3790020.00	4.85864
364523.00	3790028.00	4.86399	364523.00	3790036.00	4.86934
364539.00	3790025.00	4.40593	364539.00	3790035.00	4.41127
364565.00	3790035.00	3.81751	364570.00	3790003.00	3.70866
364566.00	3789991.00	3.78118	364565.00	3789968.00	3.79190
364546.00	3789974.00	4.20549	364546.00	3789974.00	4.20549
364524.00	3790013.00	4.82303	364524.00	3790013.00	4.82303
364551.00	3790013.00	4.10750	364551.00	3790013.00	4.10750
364484.70	3789924.90	6.29715	364494.70	3789924.90	5.82587
364504.70	3789924.90	5.41719	364514.70	3789924.90	5.05939
364524.70	3789924.90	4.74355	364534.70	3789924.90	4.46271
364544.70	3789924.90	4.21136	364554.70	3789924.90	3.98508
364564.70	3789924.90	3.78034	364574.70	3789924.90	3.59425
364484.70	3789939.90	6.31430	364494.70	3789939.90	5.84071
364504.70	3789939.90	5.43012	364514.70	3789939.90	5.07074
364524.70	3789939.90	4.75354	364534.70	3789939.90	4.47154
364544.70	3789939.90	4.21917	364554.70	3789939.90	3.99202
364564.70	3789939.90	3.78652	364574.70	3789939.90	3.59976
364484.70	3789954.90	6.33143	364494.70	3789954.90	5.85553
364504.70	3789954.90	5.44304	364514.70	3789954.90	5.08205
364524.70	3789954.90	4.76348	364534.70	3789954.90	4.48030
364544.70	3789954.90	4.22691	364554.70	3789954.90	3.99887
364564.70	3789954.90	3.79259	364574.70	3789954.90	3.60516
364484.70	3789969.90	6.34857	364494.70	3789969.90	5.87033
364504.70	3789969.90	5.45592	364514.70	3789969.90	5.09332
364524.70	3789969.90	4.77336	364534.70	3789969.90	4.48899
364544.70	3789969.90	4.23457	364554.70	3789969.90	4.00562

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3379           364564.70    3789969.90        3.79855                        364574.70
               3789969.90         3.61044
3380           364484.70    3789984.90        6.36584                        364494.70
               3789984.90         5.88521
3381           364504.70    3789984.90        5.46883                        364514.70
               3789984.90         5.10457
3382           364524.70    3789984.90        4.78321                        364534.70
               3789984.90         4.49761
3383           364544.70    3789984.90        4.24214                        364554.70
               3789984.90         4.01228
3384           364564.70    3789984.90        3.80442                        364574.70
               3789984.90         3.61562
3385           364484.70    3789999.90        6.38317                        364494.70
               3789999.90         5.90015
3386           364504.70    3789999.90        5.48178                        364514.70
               3789999.90         5.11584
3387           364524.70    3789999.90        4.79303                        364534.70
               3789999.90         4.50620
3388   FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
       I-405                          ***        12/13/22
3389    *** AERMET - VERSION  16216 ***
        ***                                                                   ***
        17:15:37
3390
                                    PAGE  98
3391    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
3392
3393                                *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION   VALUES
                                    FOR SOURCE GROUP: I-405S   ***
3394                                    INCLUDING SOURCE(S):     405S0676    , 405S0677    ,
                                        405S0678    , 405S0679    , 405S0680    ,
3395                  405S0681    , 405S0682    , 405S0683    , 405S0684    , 405S0685    ,
                      405S0686    , 405S0687    , 405S0688    ,
3396                  405S0689    , 405S0690    , 405S0691    , 405S0692    , 405S0693    ,
                      405S0694    , 405S0695    , 405S0696    ,
3397                  405S0697    , 405S0698    , 405S0699    , 405S0700    , 405S0701    ,
                      405S0702    , 405S0703    ,  . . .      ,
3398
3399                                        *** DISCRETE CARTESIAN RECEPTOR POINTS ***
3400
3401                                       ** CONC OF DPM      IN
                                           MICROGRAMS/M**3                          **
3402
3403          X-COORD (M)   Y-COORD (M)        CONC                       X-COORD (M)   Y-COORD
              (M)        CONC
3404    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
3405           364544.70    3789999.90        4.24965                        364554.70
               3789999.90         4.01887
3406           364564.70    3789999.90        3.81021                        364574.70
               3789999.90         3.62072
3407           364484.70    3790014.90        6.40054                        364494.70
               3790014.90         5.91510
3408           364504.70    3790014.90        5.49473                        364514.70
               3790014.90         5.12710
3409           364524.70    3790014.90        4.80283                        364534.70
               3790014.90         4.51475
3410           364544.70    3790014.90        4.25712                        364554.70
               3790014.90         4.02540
3411           364564.70    3790014.90        3.81592                        364574.70
               3790014.90         3.62574
3412           364484.70    3790029.90        6.41809                        364494.70
               3790029.90         5.93017
3413           364504.70    3790029.90        5.50774                        364514.70
               3790029.90         5.13836
3414           364524.70    3790029.90        4.81263                        364534.70
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            3790029.90        4.52326
3415        364544.70    3790029.90        4.26454                    364554.70
            3790029.90        4.03187
3416        364564.70    3790029.90        3.82159                    364574.70
            3790029.90        3.63071
3417        364484.70    3790044.90        6.43583                    364494.70
            3790044.90        5.94538
3418        364504.70    3790044.90        5.52085                    364514.70
            3790044.90        5.14970
3419        364524.70    3790044.90        4.82245                    364534.70
            3790044.90        4.53179
3420        364544.70    3790044.90        4.27195                    364554.70
            3790044.90        4.03833
3421        364564.70    3790044.90        3.82724                    364574.70
            3790044.90        3.63565
3422        364484.70    3790059.90        6.45367                    364494.70
            3790059.90        5.96068
3423        364504.70    3790059.90        5.53404                    364514.70
            3790059.90        5.16111
3424        364524.70    3790059.90        4.83232                    364534.70
            3790059.90        4.54036
3425        364544.70    3790059.90        4.27940                    364554.70
            3790059.90        4.04482
3426        364564.70    3790059.90        3.83289                    364574.70
            3790059.90        3.64059
3427    FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
        I-405                         ***        12/13/22
3428     *** AERMET - VERSION  16216 ***
         ***                                                          ***
         17:15:37
3429
                                    PAGE  99
3430     *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
3431
3432                                 *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION   VALUES
                                    FOR SOURCE GROUP: ALL      ***
3433                                    INCLUDING SOURCE(S):     405N0726    , 405N0727    ,
                                        405N0728    , 405N0729    , 405N0730    ,
3434                    405N0731    , 405N0732    , 405N0733    , 405N0734    , 405N0735    ,
                        405N0736    , 405N0737    , 405N0738    ,
3435                    405N0739    , 405N0740    , 405N0741    , 405N0742    , 405N0743    ,
                        405N0744    , 405N0745    , 405N0746    ,
3436                    405N0747    , 405N0748    , 405N0749    , 405N0750    , 405N0751    ,
                        405N0752    , 405N0753    ,  . . .      ,
3437
3438                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***
3439
3440                                       ** CONC OF DPM      IN
                                          MICROGRAMS/M**3                          **
3441
3442          X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)   Y-COORD
              (M)        CONC
3443     - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         - - - - - - - - - - - - - - - - - - -
3444          364522.00    3789971.00       10.37402                    364522.00
              3789971.00       10.37402
3445          364523.00    3789983.00       10.32233                    364523.00
              3789983.00       10.32233
3446          364523.00    3789994.00       10.33913                    364523.00
              3789994.00       10.33913
3447          364523.00    3790003.00       10.35275                    364523.00
              3790003.00       10.35275
3448          364540.00    3789994.00        9.26173                    364523.00
              3790020.00       10.37819
3449          364523.00    3790028.00       10.39011                    364523.00
              3790036.00       10.40202
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3450	364539.00	3790025.00	9.35665	364539.00	3790035.00	9.36857
3451	364565.00	3790035.00	8.04742	364570.00	3790003.00	7.80688
3452	364566.00	3789991.00	7.96647	364565.00	3789968.00	7.98938
3453	364546.00	3789974.00	8.90758	364546.00	3789974.00	8.90758
3454	364524.00	3790013.00	10.29754	364524.00	3790013.00	10.29754
3455	364551.00	3790013.00	8.69000	364551.00	3790013.00	8.69000
3456	364484.70	3789924.90	13.71117	364494.70	3789924.90	12.60280
3457	364504.70	3789924.90	11.65394	364514.70	3789924.90	10.83241
3458	364524.70	3789924.90	10.11409	364534.70	3789924.90	9.48062
3459	364544.70	3789924.90	8.91778	364554.70	3789924.90	8.41438
3460	364564.70	3789924.90	7.96149	364574.70	3789924.90	7.55191
3461	364484.70	3789939.90	13.75475	364494.70	3789939.90	12.63982
3462	364504.70	3789939.90	11.68575	364514.70	3789939.90	10.86001
3463	364524.70	3789939.90	10.13818	364534.70	3789939.90	9.50177
3464	364544.70	3789939.90	8.93641	364554.70	3789939.90	8.43086
3465	364564.70	3789939.90	7.97610	364574.70	3789939.90	7.56491
3466	364484.70	3789954.90	13.79714	364494.70	3789954.90	12.67594
3467	364504.70	3789954.90	11.71685	364514.70	3789954.90	10.88700
3468	364524.70	3789954.90	10.16175	364534.70	3789954.90	9.52244
3469	364544.70	3789954.90	8.95460	364554.70	3789954.90	8.44692
3470	364564.70	3789954.90	7.99032	364574.70	3789954.90	7.57753
3471	364484.70	3789969.90	13.83854	364494.70	3789969.90	12.71123
3472	364504.70	3789969.90	11.74726	364514.70	3789969.90	10.91339
3473	364524.70	3789969.90	10.18478	364534.70	3789969.90	9.54263
3474	364544.70	3789969.90	8.97236	364554.70	3789969.90	8.46257
3475	364564.70	3789969.90	8.00415	364574.70	3789969.90	7.58977
3476	364484.70	3789984.90	13.87940	364494.70	3789984.90	12.74604
3477	364504.70	3789984.90	11.77721	364514.70	3789984.90	10.93936
3478	364524.70	3789984.90	10.20741	364534.70	3789984.90	9.56242
3479	364544.70	3789984.90	8.98972	364554.70	3789984.90	8.47784
3480	364564.70	3789984.90	8.01760	364574.70	3789984.90	7.60167
3481	364484.70	3789999.90	13.91957	364494.70	3789999.90	12.78033
3482	364504.70	3789999.90	11.80674	364514.70	3789999.90	10.96496

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          364524.70    3789999.90       10.22971                       364534.70
          3789999.90        9.58191
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
I-405                          ***        12/13/22
 *** AERMET - VERSION  16216 ***
 ***                                                                    ***
 17:15:37

                                PAGE 100
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                                *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION   VALUES
                                FOR SOURCE GROUP: ALL      ***
                                    INCLUDING SOURCE(S):     405N0726    , 405N0727    ,
                                    405N0728    , 405N0729    , 405N0730    ,
                  405N0731    , 405N0732    , 405N0733    , 405N0734    , 405N0735    ,
                  405N0736    , 405N0737    , 405N0738    ,
                  405N0739    , 405N0740    , 405N0741    , 405N0742    , 405N0743    ,
                  405N0744    , 405N0745    , 405N0746    ,
                  405N0747    , 405N0748    , 405N0749    , 405N0750    , 405N0751    ,
                  405N0752    , 405N0753    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                       ** CONC OF DPM      IN
                                       MICROGRAMS/M**3                          **

        X-COORD (M)   Y-COORD (M)        CONC                       X-COORD (M)   Y-COORD
        (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - -
          364544.70    3789999.90        9.00679                       364554.70
          3789999.90        8.49281
          364564.70    3789999.90        8.03078                       364574.70
          3789999.90        7.61328
          364484.70    3790014.90       13.95919                       364494.70
          3790014.90       12.81416
          364504.70    3790014.90       11.83589                       364514.70
          3790014.90       10.99023
          364524.70    3790014.90       10.25170                       364534.70
          3790014.90        9.60111
          364544.70    3790014.90        9.02359                       364554.70
          3790014.90        8.50754
          364564.70    3790014.90        8.04370                       364574.70
          3790014.90        7.62463
          364484.70    3790029.90       13.99887                       364494.70
          3790029.90       12.84797
          364504.70    3790029.90       11.86495                       364514.70
          3790029.90       11.01535
          364524.70    3790029.90       10.27353                       364534.70
          3790029.90        9.62012
          364544.70    3790029.90        9.04019                       364554.70
          3790029.90        8.52204
          364564.70    3790029.90        8.05640                       364574.70
          3790029.90        7.63577
          364484.70    3790044.90       14.03860                       364494.70
          3790044.90       12.88183
          364504.70    3790044.90       11.89404                       364514.70
          3790044.90       11.04048
          364524.70    3790044.90       10.29533                       364534.70
          3790044.90        9.63908
          364544.70    3790044.90        9.05669                       364554.70
          3790044.90        8.53644
          364564.70    3790044.90        8.06897                       364574.70
          3790044.90        7.64675
          364484.70    3790059.90       14.07822                       364494.70
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3790059.90       12.91563
364504.70   3790059.90       11.92310                         364514.70   3790059.90       11.06562
364524.70   3790059.90       10.31713                         364534.70   3790059.90        9.65803
364544.70   3790059.90        9.07318                         364554.70   3790059.90        8.55080
364564.70   3790059.90        8.08148                         364574.70   3790059.90        7.65765
FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From I-405              ***        12/13/22
 *** AERMET - VERSION  16216 ***                                                                   ***        17:15:37

                              PAGE 101
 *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*

                                       *** THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS ***


                                   ** CONC OF DPM      IN MICROGRAMS/M**3                          **


                                                                                       NETWORK
GROUP ID                       AVERAGE CONC                RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

I-405N    1ST HIGHEST VALUE IS       7.62455 AT (  364484.70,  3790059.90,   235.00,   235.00,    0.00)  DC
          2ND HIGHEST VALUE IS       7.60277 AT (  364484.70,  3790044.90,   235.00,   235.00,    0.00)  DC
          3RD HIGHEST VALUE IS       7.58077 AT (  364484.70,  3790029.90,   235.00,   235.00,    0.00)  DC
          4TH HIGHEST VALUE IS       7.55865 AT (  364484.70,  3790014.90,   235.00,   235.00,    0.00)  DC
          5TH HIGHEST VALUE IS       7.53641 AT (  364484.70,  3789999.90,   235.00,   235.00,    0.00)  DC
          6TH HIGHEST VALUE IS       7.51356 AT (  364484.70,  3789984.90,   235.00,   235.00,    0.00)  DC
          7TH HIGHEST VALUE IS       7.48997 AT (  364484.70,  3789969.90,   235.00,   235.00,    0.00)  DC
          8TH HIGHEST VALUE IS       7.46571 AT (  364484.70,  3789954.90,   235.00,   235.00,    0.00)  DC
          9TH HIGHEST VALUE IS       7.44045 AT (  364484.70,  3789939.90,   235.00,   235.00,    0.00)  DC
         10TH HIGHEST VALUE IS       7.41402 AT (  364484.70,  3789924.90,   235.00,   235.00,    0.00)  DC

I-405S    1ST HIGHEST VALUE IS       6.45367 AT (  364484.70,  3790059.90,   235.00,   235.00,    0.00)  DC
          2ND HIGHEST VALUE IS       6.43583 AT (  364484.70,  3790044.90,   235.00,   235.00,    0.00)  DC
          3RD HIGHEST VALUE IS       6.41809 AT (  364484.70,  3790029.90,   235.00,   235.00,    0.00)  DC
          4TH HIGHEST VALUE IS       6.40054 AT (  364484.70,  3790014.90,   235.00,   235.00,    0.00)  DC
          5TH HIGHEST VALUE IS       6.38317 AT (  364484.70,  3789999.90,   235.00,   235.00,    0.00)  DC
          6TH HIGHEST VALUE IS       6.36584 AT (  364484.70,  3789984.90,   235.00,   235.00,    0.00)  DC
          7TH HIGHEST VALUE IS       6.34857 AT (  364484.70,  3789969.90,   235.00,
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            235.00,    0.00)  DC
3555        8TH HIGHEST VALUE IS       6.33143 AT (  364484.70,  3789954.90,   235.00,
            235.00,    0.00)  DC
3556        9TH HIGHEST VALUE IS       6.31430 AT (  364484.70,  3789939.90,   235.00,
            235.00,    0.00)  DC
3557       10TH HIGHEST VALUE IS       6.29715 AT (  364484.70,  3789924.90,   235.00,
           235.00,    0.00)  DC
3558
3559  ALL   1ST HIGHEST VALUE IS      14.07822 AT (  364484.70,  3790059.90,   235.00,
      235.00,    0.00)  DC
3560        2ND HIGHEST VALUE IS      14.03860 AT (  364484.70,  3790044.90,   235.00,
            235.00,    0.00)  DC
3561        3RD HIGHEST VALUE IS      13.99887 AT (  364484.70,  3790029.90,   235.00,
            235.00,    0.00)  DC
3562        4TH HIGHEST VALUE IS      13.95919 AT (  364484.70,  3790014.90,   235.00,
            235.00,    0.00)  DC
3563        5TH HIGHEST VALUE IS      13.91957 AT (  364484.70,  3789999.90,   235.00,
            235.00,    0.00)  DC
3564        6TH HIGHEST VALUE IS      13.87940 AT (  364484.70,  3789984.90,   235.00,
            235.00,    0.00)  DC
3565        7TH HIGHEST VALUE IS      13.83854 AT (  364484.70,  3789969.90,   235.00,
            235.00,    0.00)  DC
3566        8TH HIGHEST VALUE IS      13.79714 AT (  364484.70,  3789954.90,   235.00,
            235.00,    0.00)  DC
3567        9TH HIGHEST VALUE IS      13.75475 AT (  364484.70,  3789939.90,   235.00,
            235.00,    0.00)  DC
3568       10TH HIGHEST VALUE IS      13.71117 AT (  364484.70,  3789924.90,   235.00,
           235.00,    0.00)  DC
3569
3570
3571   *** RECEPTOR TYPES:  GC = GRIDCART
3572                        GP = GRIDPOLR
3573                        DC = DISCCART
3574                        DP = DISCPOLR
3575   FF *** AERMOD - VERSION 22112  ***   ***  Valor Elementary Exposure To DPM From
       I-405                        ***        12/13/22
3576    *** AERMET - VERSION  16216 ***
        ***                                                              ***
        17:15:37
3577
                                  PAGE 102
3578    *** MODELOPTs:    NonDFAULT  CONC  FLAT  NODRYDPLT  NOWETDPLT  RURAL  NoUrbTran  ADJ_U*
3579
3580    *** Message Summary : AERMOD Model Execution ***
3581
3582     --------- Summary of Total Messages --------
3583
3584    A Total of            0 Fatal Error Message(s)
3585    A Total of            9 Warning Message(s)
3586    A Total of          839 Informational Message(s)
3587
3588    A Total of        43848 Hours Were Processed
3589
3590    A Total of          604 Calm Hours Identified
3591
3592    A Total of          235 Missing Hours Identified (  0.54 Percent)
3593
3594
3595       ******** FATAL ERROR MESSAGES ********
3596                 ***  NONE  ***
3597
3598
3599       ********   WARNING MESSAGES   ********
3600    CO W151       7       MODOPT: Non-DFAULT NoUrbTran option selected on MODELOPT
        Keyword
3601    ME W186     937       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
```

```
      used           0.50
3602  ME W187     937       MEOPEN: ADJ_U* Option for Stable Low Winds used in
      AERMET
3603  OU W565     941       PERPLT: Possible Conflict With Dynamically Allocated FUNIT
      PLOTFILE
3604  OU W565     942       PERPLT: Possible Conflict With Dynamically Allocated FUNIT
      PLOTFILE
3605  OU W565     943       PERPLT: Possible Conflict With Dynamically Allocated FUNIT
      PLOTFILE
3606  OU W565     944       PERPST: Possible Conflict With Dynamically Allocated FUNIT
      POSTFILE
3607  OU W565     945       PERPST: Possible Conflict With Dynamically Allocated FUNIT
      POSTFILE
3608  OU W565     946       PERPST: Possible Conflict With Dynamically Allocated FUNIT
      POSTFILE
3609
3610     ************************************
3611     *** AERMOD Finishes Successfully ***
3612     ************************************
3613
3614
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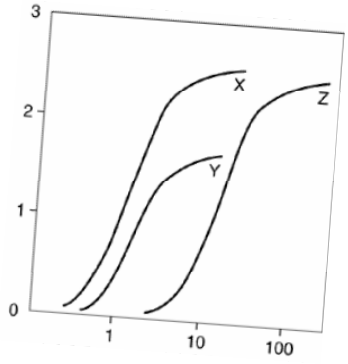

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James J. J. Clark, Ph.D.

Principal Toxicologist

Toxicology/Exposure Assessment Modeling

Risk Assessment/Analysis/Dispersion Modeling

Education:

Ph.D., Environmental Health Science, University of California, 1995

M.S., Environmental Health Science, University of California, 1993

B.S., Biophysical and Biochemical Sciences, University of Houston, 1987

Professional Experience:

Dr. Clark is a well recognized toxicologist, air modeler, and health scientist. He has 20 years of experience in researching the effects of environmental contaminants on human health including environmental fate and transport modeling (SCREEN3, AEROMOD, ISCST3, Johnson-Ettinger Vapor Intrusion Modeling); exposure assessment modeling (partitioning of contaminants in the environment as well as PBPK modeling); conducting and managing human health risk assessments for regulatory compliance and risk-based clean-up levels; and toxicological and medical literature research.

Significant projects performed by Dr. Clark include the following:

LITIGATION SUPPORT

Case: James Harold Caygle, et al, v. Drummond Company, Inc. Circuit Court for the Tenth Judicial Circuit, Jefferson County, Alabama. Civil Action. CV-2009

Client: Environmental Litgation Group, Birmingham, Alabama

Dr. Clark performed an air quality assessment of emissions from a coke factory located in Tarrant, Alabama. The assessment reviewed include a comprehensive review of air quality standards, measured concentrations of pollutants from factory, an inspection of the facility and detailed assessment of the impacts on the community. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Rose Roper V. Nissan North America, et al. Superior Court of the State Of California for the County Of Los Angeles – Central Civil West. Civil Action. NC041739

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to multiple chemicals, including benzene, who later developed a respiratory distress. A review of the individual's medical and occupational history was performed to prepare an exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to respiratory irritants. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: O'Neil V. Sherwin Williams, et al. United States District Court Central District of California

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to petroleum distillates who later developed a bladder cancer. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Summary judgment for defendants.

Case: Moore V., Shell Oil Company, et al. Superior Court of the State Of California for the County Of Los Angeles

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to chemicals while benzene who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Raymond Saltonstall V. Fuller O'Brien, KILZ, and Zinsser, et al. United States District Court Central District of California

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to benzene who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Richard Boyer and Elizabeth Boyer, husband and wife, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-7G.

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of a family exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: JoAnne R. Cook, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-9R

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of an individual exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Patrick Allen And Susan Allen, husband and wife, and Andrew Allen, a minor, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-W

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of a family exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Michael Fahey, Susan Fahey V. Atlantic Richfield Company, et al. United States District Court Central District of California Civil Action Number CV-06 7109 JCL.

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to refined petroleum hydrocarbons who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Constance Acevedo, et al., V. California Spray-Chemical Company, et al., Superior Court of the State Of California, County Of Santa Cruz. Case No. CV 146344

Dr. Clark performed a comprehensive exposure assessment of community members exposed to toxic metals from a former lead arsenate manufacturing facility. The former manufacturing site had undergone a DTSC mandated removal action/remediation for the presence of the toxic metals at the site. Opinions were presented regarding the elevated levels of arsenic and lead (in attic dust and soils) found throughout the community and the potential for harm to the plaintiffs in question.

Case Result: Settlement in favor of defendant.

Case: Michael Nawrocki V. The Coastal Corporation, Kurk Fuel Company, Pautler Oil Service, State of New York Supreme Court, County of Erie, Index Number I2001-11247

Client: Richard G. Berger Attorney At Law, Buffalo, New York

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to refined petroleum hydrocarbons who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the

known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Judgement in favor of defendant.

SELECTED AIR MODELING RESEARCH/PROJECTS

Client – Confidential

Dr. Clark performed a comprehensive evaluation of criteria pollutants, air toxins, and particulate matter emissions from a carbon black production facility to determine the impacts on the surrounding communities. The results of the dispersion model will be used to estimate acute and chronic exposure concentrations to multiple contaminants and will be incorporated into a comprehensive risk evaluation.

Client – Confidential

Dr. Clark performed a comprehensive evaluation of air toxins and particulate matter emissions from a railroad tie manufacturing facility to determine the impacts on the surrounding communities. The results of the dispersion model have been used to estimate acute and chronic exposure concentrations to multiple contaminants and have been incorporated into a comprehensive risk evaluation.

Client – Los Angeles Alliance for a New Economy (LAANE), Los Angeles, California

Dr. Clark is advising the LAANE on air quality issues related to current flight operations at the Los Angeles International Airport (LAX) operated by the Los Angeles World Airport (LAWA) Authority. He is working with the LAANE and LAX staff to develop a comprehensive strategy for meeting local community concerns over emissions from flight operations and to engage federal agencies on the issue of local impacts of community airports.

Client – City of Santa Monica, Santa Monica, California

Dr. Clark is advising the City of Santa Monica on air quality issues related to current flight operations at the facility. He is working with the City staff to develop a comprehensive strategy for meeting local community concerns over emissions from flight operations and to engage federal agencies on the issue of local impacts of community airports.

Client: Omnitrans, San Bernardino, California

Dr. Clark managed a public health survey of three communities near transit fueling facilities in San Bernardino and Montclair California in compliance with California Senate Bill 1927. The survey included an epidemiological survey of the effected communities, emission surveys of local businesses, dispersion modeling to determine potential emission concentrations within the communities, and a comprehensive risk assessment of each community. The results of the study were presented to the Governor as mandated by Senate Bill 1927.

Client: Confidential, San Francisco, California

Summarized cancer types associated with exposure to metals and smoking. Researched the specific types of cancers associated with exposure to metals and smoking. Provided causation analysis of the association between cancer types and exposure for use by non-public health professionals.

Client: Confidential, Minneapolis, Minnesota

Prepared human health risk assessment of workers exposed to VOCs from neighboring petroleum storage/transport facility. Reviewed the systems in place for distribution of petroleum hydrocarbons to identify chemicals of concern (COCs), prepared comprehensive toxicological summaries of COCs, and quantified potential risks from carcinogens and non-carcinogens to receptors at or adjacent to site. This evaluation was used in the support of litigation.

Client – United Kingdom Environmental Agency

Dr. Clark is part of team that performed comprehensive evaluation of soil vapor intrusion of VOCs from former landfill adjacent residences for the United Kingdom's Environment

Agency. The evaluation included collection of liquid and soil vapor samples at site, modeling of vapor migration using the Johnson Ettinger Vapor Intrusion model, and calculation of site-specific health based vapor thresholds for chlorinated solvents, aromatic hydrocarbons, and semi-volatile organic compounds. The evaluation also included a detailed evaluation of the use, chemical characteristics, fate and transport, and toxicology of chemicals of concern (COC). The results of the evaluation have been used as a briefing tool for public health professionals.

EMERGING/PERSISTENT CONTAMINANT RESEARCH/PROJECTS

Client: Ameren Services, St. Louis, Missouri

Managed the preparation of a comprehensive human health risk assessment of workers and residents at or near an NPL site in Missouri. The former operations at the Property included the servicing and repair of electrical transformers, which resulted in soils and groundwater beneath the Property and adjacent land becoming impacted with PCB and chlorinated solvent compounds. The results were submitted to U.S. EPA for evaluation and will be used in the final ROD.

Client: City of Santa Clarita, Santa Clarita, California

Dr. Clark is managing the oversight of the characterization, remediation and development activities of a former 1,000 acre munitions manufacturing facility for the City of Santa Clarita. The site is impacted with a number of contaminants including perchlorate, unexploded ordinance, and volatile organic compounds (VOCs). The site is currently under a number of regulatory consent orders, including an Immanent and Substantial Endangerment Order. Dr. Clark is assisting the impacted municipality with the development of remediation strategies, interaction with the responsible parties and stakeholders, as well as interfacing with the regulatory agency responsible for oversight of the site cleanup.

Client: Confidential, Los Angeles, California

Prepared comprehensive evaluation of perchlorate in environment. Dr. Clark evaluated the production, use, chemical characteristics, fate and transport, toxicology, and remediation of perchlorate. Perchlorates form the basis of solid rocket fuels and have recently been detected in water supplies in the United States. The results of this research

were presented to the USEPA, National GroundWater, and ultimately published in a recent book entitled *Perchlorate in the Environment.*

Client – Confidential, Los Angeles, California

Dr. Clark is performing a comprehensive review of the potential for pharmaceuticals and their by-products to impact groundwater and surface water supplies. This evaluation will include a review if available data on the history of pharmaceutical production in the United States; the chemical characteristics of various pharmaceuticals; environmental fate and transport; uptake by xenobiotics; the potential effects of pharmaceuticals on water treatment systems; and the potential threat to public health. The results of the evaluation may be used as a briefing tool for non-public health professionals.

PUBLIC HEALTH/TOXICOLOGY

Client: Brayton Purcell, Novato, California

Dr. Clark performed a toxicological assessment of residents exposed to methyl-tertiary butyl ether (MTBE) from leaking underground storage tanks (LUSTs) adjacent to the subject property. The symptomology of residents and guests of the subject property were evaluated against the known outcomes in published literature to exposure to MTBE. The study found that residents had been exposed to MTBE in their drinking water; that concentrations of MTBE detected at the site were above regulatory guidelines; and, that the symptoms and outcomes expressed by residents and guests were consistent with symptoms and outcomes documented in published literature.

Client: Confidential, San Francisco, California

Identified and analyzed fifty years of epidemiological literature on workplace exposures to heavy metals. This research resulted in a summary of the types of cancer and non-cancer diseases associated with occupational exposure to chromium as well as the mortality and morbidity rates.

Client: Confidential, San Francisco, California

Summarized major public health research in United States. Identified major public health research efforts within United States over last twenty years. Results were used as a briefing tool for non-public health professionals.

Client: Confidential, San Francisco, California

Quantified the potential multi-pathway dose received by humans from a pesticide applied indoors. Part of team that developed exposure model and evaluated exposure concentrations in a comprehensive report on the plausible range of doses received by a specific person. This evaluation was used in the support of litigation.

Client: Covanta Energy, Westwood, California

Evaluated health risk from metals in biosolids applied as soil amendment on agricultural lands. The biosolids were created at a forest waste cogeneration facility using 96% whole tree wood chips and 4 percent green waste. Mass loading calculations were used to estimate Cr(VI) concentrations in agricultural soils based on a maximum loading rate of 40 tons of biomass per acre of agricultural soil. The results of the study were used by the Regulatory agency to determine that the application of biosolids did not constitute a health risk to workers applying the biosolids or to residences near the agricultural lands.

Client – United Kingdom Environmental Agency

Oversaw a comprehensive toxicological evaluation of methyl-*tertiary* butyl ether (M*t*BE) for the United Kingdom's Environment Agency. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of M*t*BE. The results of the evaluation have been used as a briefing tool for public health professionals.

Client – Confidential, Los Angeles, California

Prepared comprehensive evaluation of *tertiary* butyl alcohol (TBA) in municipal drinking water system. TBA is the primary breakdown product of M*t*BE, and is suspected to be the primary cause of M*t*BE toxicity. This evaluation will include available information on the production, use, chemical characteristics, fate and transport in the environment, absorption, distribution, routes of detoxification, metabolites, carcinogenic potential, and remediation of TBA. The results of the evaluation were used as a briefing tool for non-public health professionals.

Client – Confidential, Los Angeles, California

Prepared comprehensive evaluation of methyl *tertiary* butyl ether (MTBE) in municipal drinking water system. MTBE is a chemical added to gasoline to increase the octane

rating and to meet Federally mandated emission criteria. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of MTBE. The results of the evaluation have been were used as a briefing tool for non-public health professionals.

Client – Ministry of Environment, Lands & Parks, British Columbia

Dr. Clark assisted in the development of water quality guidelines for methyl tertiary-butyl ether (MTBE) to protect water uses in British Columbia (BC). The water uses to be considered includes freshwater and marine life, wildlife, industrial, and agricultural (e.g., irrigation and livestock watering) water uses. Guidelines from other jurisdictions for the protection of drinking water, recreation and aesthetics were to be identified.

Client: Confidential, Los Angeles, California

Prepared physiologically based pharmacokinetic (PBPK) assessment of lead risk of receptors at middle school built over former industrial facility. This evaluation is being used to determine cleanup goals and will be basis for regulatory closure of site.

Client: Kaiser Venture Incorporated, Fontana, California

Prepared PBPK assessment of lead risk of receptors at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

RISK ASSESSMENTS/REMEDIAL INVESTIGATIONS

Client: Confidential, Atlanta, Georgia

Researched potential exposure and health risks to community members potentially exposed to creosote, polycyclic aromatic hydrocarbons, pentachlorophenol, and dioxin compounds used at a former wood treatment facility. Prepared a comprehensive toxicological summary of the chemicals of concern, including the chemical characteristics, absorption, distribution, and carcinogenic potential. Prepared risk characterization of the carcinogenic and non-carcinogenic chemicals based on the exposure assessment to quantify the potential risk to members of the surrounding community. This evaluation was used to help settle class-action tort.

Client: Confidential, Escondido, California

Prepared comprehensive Preliminary Endangerment Assessment (PEA) of dense non-aqueous liquid phase hydrocarbon (chlorinated solvents) contamination at a former printed circuit board manufacturing facility. This evaluation was used for litigation support and may be used as the basis for reaching closure of the site with the lead regulatory agency.

Client: Confidential, San Francisco, California

Summarized epidemiological evidence for connective tissue and autoimmune diseases for product liability litigation. Identified epidemiological research efforts on the health effects of medical prostheses. This research was used in a meta-analysis of the health effects and as a briefing tool for non-public health professionals.

Client: Confidential, Bogotá, Columbia

Prepared comprehensive evaluation of the potential health risks associated with the redevelopment of a 13.7 hectares plastic manufacturing facility in Bogotá, Colombia The risk assessment was used as the basis for the remedial goals and closure of the site.

Client: Confidential, Los Angeles, California

Prepared comprehensive human health risk assessment of students, staff, and residents potentially exposed to heavy metals (principally cadmium) and VOCs from soil and soil vapor at 12-acre former crude oilfield and municipal landfill. The site is currently used as a middle school housing approximately 3,000 children. The evaluation determined that the site was safe for the current and future uses and was used as the basis for regulatory closure of site.

Client: Confidential, Los Angeles, California

Managed remedial investigation (RI) of heavy metals and volatile organic chemicals (VOCs) for a 15-acre former manufacturing facility. The RI investigation of the site included over 800 different sampling locations and the collection of soil, soil gas, and groundwater samples. The site is currently used as a year round school housing approximately 3,000 children. The Remedial Investigation was performed in a manner

that did not interrupt school activities and met the time restrictions placed on the project by the overseeing regulatory agency. The RI Report identified the off-site source of metals that impacted groundwater beneath the site and the sources of VOCs in soil gas and groundwater. The RI included a numerical model of vapor intrusion into the buildings at the site from the vadose zone to determine exposure concentrations and an air dispersion model of VOCs from the proposed soil vapor treatment system. The Feasibility Study for the Site is currently being drafted and may be used as the basis for granting closure of the site by DTSC.

Client: Confidential, Los Angeles, California

Prepared comprehensive human health risk assessment of students, staff, and residents potentially exposed to heavy metals (principally lead), VOCs, SVOCs, and PCBs from soil, soil vapor, and groundwater at 15-acre former manufacturing facility. The site is currently used as a year round school housing approximately 3,000 children. The evaluation determined that the site was safe for the current and future uses and will be basis for regulatory closure of site.

Client: Confidential, Los Angeles, California

Prepared comprehensive evaluation of VOC vapor intrusion into classrooms of middle school that was former 15-acre industrial facility. Using the Johnson-Ettinger Vapor Intrusion model, the evaluation determined acceptable soil gas concentrations at the site that did not pose health threat to students, staff, and residents. This evaluation is being used to determine cleanup goals and will be basis for regulatory closure of site.

Client –Dominguez Energy, Carson, California

Prepared comprehensive evaluation of the potential health risks associated with the redevelopment of 6-acre portion of a 500-acre oil and natural gas production facility in Carson, California. The risk assessment was used as the basis for closure of the site.

Kaiser Ventures Incorporated, Fontana, California

Prepared health risk assessment of semi-volatile organic chemicals and metals for a fifty-year old wastewater treatment facility used at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

ANR Freight - Los Angeles, California

Prepared a comprehensive Preliminary Endangerment Assessment (PEA) of petroleum hydrocarbon and metal contamination of a former freight depot. This evaluation was as the basis for reaching closure of the site with lead regulatory agency.

Kaiser Ventures Incorporated, Fontana, California

Prepared comprehensive health risk assessment of semi-volatile organic chemicals and metals for 23-acre parcel of a 1,100-acre former steel mill. The health risk assessment was used to determine clean up goals and as the basis for granting closure of the site by lead regulatory agency. Air dispersion modeling using ISCST3 was performed to determine downwind exposure point concentrations at sensitive receptors within a 1 kilometer radius of the site. The results of the health risk assessment were presented at a public meeting sponsored by the Department of Toxic Substances Control (DTSC) in the community potentially affected by the site.

Unocal Corporation - Los Angeles, California

Prepared comprehensive assessment of petroleum hydrocarbons and metals for a former petroleum service station located next to sensitive population center (elementary school). The assessment used a probabilistic approach to estimate risks to the community and was used as the basis for granting closure of the site by lead regulatory agency.

Client: Confidential, Los Angeles, California

Managed oversight of remedial investigation most contaminated heavy metal site in California. Lead concentrations in soil excess of 68,000,000 parts per billion (ppb) have been measured at the site. This State Superfund Site was a former hard chrome plating operation that operated for approximately 40-years.

Client: Confidential, San Francisco, California

Coordinator of regional monitoring program to determine background concentrations of metals in air. Acted as liaison with SCAQMD and CARB to perform co-location sampling and comparison of accepted regulatory method with ASTM methodology.

Client: Confidential, San Francisco, California

Analyzed historical air monitoring data for South Coast Air Basin in Southern California and potential health risks related to ambient concentrations of carcinogenic metals and volatile organic compounds. Identified and reviewed the available literature and calculated risks from toxins in South Coast Air Basin.

IT Corporation, North Carolina

Prepared comprehensive evaluation of potential exposure of workers to air-borne VOCs at hazardous waste storage facility under SUPERFUND cleanup decree. Assessment used in developing health based clean-up levels.

Professional Associations

American Public Health Association (APHA)
Association for Environmental Health and Sciences (AEHS)
American Chemical Society (ACS)
California Redevelopment Association (CRA)
International Society of Environmental Forensics (ISEF)
Society of Environmental Toxicology and Chemistry (SETAC)

Publications and Presentations:

Books and Book Chapters

Sullivan, P., **J.J. J. Clark,** F.J. Agardy, and P.E. Rosenfeld. (2007). *Synthetic Toxins In The Food, Water and Air of American Cities*. Elsevier, Inc. Burlington, MA.

Sullivan, P. and **J.J. J. Clark**. 2006. *Choosing Safer Foods, A Guide To Minimizing Synthetic Chemicals In Your Diet*. Elsevier, Inc. Burlington, MA.

Sullivan, P., Agardy, F.J., and **J.J.J. Clark**. 2005. *The Environmental Science of Drinking Water*. Elsevier, Inc. Burlington, MA.

Sullivan, P.J., Agardy, F.J., **Clark, J.J.J.** 2002. *America's Threatened Drinking Water: Hazards and Solutions*. Trafford Publishing, Victoria B.C.

Clark, J.J.J. 2001. "TBA: Chemical Properties, Production & Use, Fate and Transport, Toxicology, Detection in Groundwater, and Regulatory Standards" in *Oxygenates in the Environment.* Art Diaz, Ed.. Oxford University Press: New York.

Clark, J.J.J. 2000. "Toxicology of Perchlorate" in *Perchlorate in the Environment.* Edward Urbansky, Ed. Kluwer/Plenum: New York.

Clark, J.J.J. 1995. Probabilistic Forecasting of Volatile Organic Compound Concentrations At The Soil Surface From Contaminated Groundwater. UMI.

Baker, J.; **Clark, J.J.J.**; Stanford, J.T. 1994. Ex Situ Remediation of Diesel Contaminated Railroad Sand by Soil Washing. Principles and Practices for Diesel Contaminated Soils, Volume III. P.T. Kostecki, E.J. Calabrese, and C.P.L. Barkan, eds. Amherst Scientific Publishers, Amherst, MA. pp 89-96.

Journal and Proceeding Articles

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equialency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. Organohalogen Compounds, Volume 70 (2008) page 002254.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. Organohalogen Compounds, Volume 70 (2008) page 000527

Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** (2007). "Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." *Environmental Research.* 105:194-199.

Rosenfeld, P.E., **Clark, J. J.,** Hensley, A.R., and Suffet, I.H. 2007. "The Use Of An Odor Wheel Classification For The Evaluation of Human Health Risk Criteria For Compost Facilities" Water Science & Technology. 55(5): 345-357.

Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** 2006. "Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006, August 21 – 25, 2006. Radisson SAS Scandinavia Hotel in Oslo Norway.

Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2005. "The Value Of An Odor Quality Classification Scheme For Compost Facility Evaluations" The U.S. Composting Council's 13th Annual Conference January 23 - 26, 2005, Crowne Plaza Riverwalk, San Antonio, TX.

Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2004. "The Value Of An Odor Quality Classification Scheme For Urban Odor" WEFTEC 2004. 77th Annual Technical Exhibition & Conference October 2 - 6, 2004, Ernest N. Morial Convention Center, New Orleans, Louisiana.

Clark, J.J.J. 2003. "Manufacturing, Use, Regulation, and Occurrence of a Known Endocrine Disrupting Chemical (EDC), 2,4-Dichlorophnoxyacetic Acid (2,4-D) in California Drinking Water Supplies." National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Minneapolis, MN. March 20, 2003.

Rosenfeld, P. and **J.J.J. Clark**. 2003. "Understanding Historical Use, Chemical Properties, Toxicity, and Regulatory Guidance" National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Phoenix, AZ. February 21, 2003.

Clark, J.J.J., Brown A. 1999. Perchlorate Contamination: Fate in the Environment and Treatment Options. In Situ and On-Site Bioremediation, Fifth International Symposium. San Diego, CA, April, 1999.

Clark, J.J.J. 1998. Health Effects of Perchlorate and the New Reference Dose (RfD). Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.

Browne, T., **Clark, J.J.J.** 1998. Treatment Options For Perchlorate In Drinking Water. Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.

Clark, J.J.J., Brown, A., Rodriguez, R. 1998. The Public Health Implications of MtBE and Perchlorate in Water: Risk Management Decisions for Water Purveyors. Proceedings of the National Ground Water Association, Anaheim, CA, June 3-4, 1998.

Clark J.J.J., Brown, A., Ulrey, A. 1997. Impacts of Perchlorate On Drinking Water In The Western United States. U.S. EPA Symposium on Biological and Chemical Reduction of Chlorate and Perchlorate, Cincinnati, OH, December 5, 1997.

Clark, J.J.J.; Corbett, G.E.; Kerger, B.D.; Finley, B.L.; Paustenbach, D.J. 1996. Dermal Uptake of Hexavalent Chromium In Human Volunteers: Measures of Systemic Uptake From Immersion in Water At 22 PPM. Toxicologist. 30(1):14.

Dodge, D.G.; **Clark, J.J.J.**; Kerger, B.D.; Richter, R.O.; Finley, B.L.; Paustenbach, D.J. 1996. Assessment of Airborne Hexavalent Chromium In The Home Following Use of Contaminated Tapwater. Toxicologist. 30(1):117-118.

Paulo, M.T.; Gong, H., Jr.; **Clark, J.J.J.** (1992). Effects of Pretreatment with Ipratroprium Bromide in COPD Patients Exposed to Ozone. American Review of Respiratory Disease. 145(4):A96.

Harber, P.H.; Gong, H., Jr.; Lachenbruch, A.; **Clark, J.**; Hsu, P. (1992). Respiratory Pattern Effect of Acute Sulfur Dioxide Exposure in Asthmatics. American Review of Respiratory Disease. 145(4):A88.

McManus, M.S.; Gong, H., Jr.; Clements, P.; **Clark, J.J.J.** (1991). Respiratory Response of Patients With Interstitial Lung Disease To Inhaled Ozone. American Review of Respiratory Disease. 143(4):A91.

Gong, H., Jr.; Simmons, M.S.; McManus, M.S.; Tashkin, D.P.; Clark, V.A.; Detels, R.; **Clark, J.J.** (1990). Relationship Between Responses to Chronic Oxidant and Acute

Ozone Exposures in Residents of Los Angeles County. American Review of Respiratory Disease. 141(4):A70.

Tierney, D.F. and **J.J.J. Clark.** (1990). Lung Polyamine Content Can Be Increased By Spermidine Infusions Into Hyperoxic Rats. American Review of Respiratory Disease. 139(4):A41.

EXHIBIT B

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA
WASHINGTON
NEW YORK

WI #22-005.35

December 14, 2022

Kevin T. Carmichael
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

SUBJECT: Comments on Valor Elementary School Project Noise and Vibration Study

Dear Mr. Carmichael,

Per your request, I have reviewed the Noise and Vibration Study for the Valor Elementary School Project Mitigated Negative Declaration (MND) in the Mission Hills – Panorama City – North Hills Community Plan Area in the City of Los Angeles, California. The proposed project involves the construction of a one and two-story elementary school building, a multi-purpose room, administrative offices, covered outdoor dining, and surface parking on the project site. The Noise and Vibration Impact Analysis is contained in Section XIII of the MND, with supplemental calculations in Appendix I Noise and Vibration Study (Noise Study).

The Project is surrounded by noise sensitive uses – residences directly adjacent to the east, south and west, and residences to the north across Plummer Street, as well as Plummer Village Senior Community Center to the east of the site.

Baseline Noise Level characterizations are Incomplete

The noise analysis relies on two short-term measurements of 15-minute duration, on Wednesday, May 25, 2022, between 8:57 a.m. and 9:31 a.m. (MND page 102) and one 14-hour long-term measurement on May 25th and 26th (MND page 103).

The manner in which the MND has determined the existing noise environment is poorly supported. The noise environment is affected by transportation sources that can change from hour to hour and day to day, and best practices call for documentation of the existing condition with measurements at different times over several days. The long-term noise measurement would seem to document these changes, but is located at the back of the project site, is partially shielded from both nearby streets and does not capture traffic patterns at residences close to Plummer Street. As shown in Tables 18 and 19, the short-term Leq at location ST-1 is more than 10 dB higher than the same time frame at LT-1.

Higher baseline noise levels at the residences on Plummer Street would result in a noise environment that exceeds the normally acceptable CNEL levels for single-family homes per the Land Use and Noise Compatibility Matrix presented (MND page 105).

The MND should include an updated baseline analysis that incorporates noise measurements taken at key locations over a multi-day period, and to provide supporting information to validate the results.

Thresholds of Significance are Not Properly Developed

Construction Noise

The Noise Study sites LAMC (City of Los Angeles Municipal Code) Section 112.05 construction threshold (MND page 108) of 75 dBA *maximum noise level at 50 feet from the source*. LA County Code of Ordinances Section 12.08.440[1] provides a more conservative daytime threshold *at residential structures* of 75 dB for short-term operation and 60 dBA for long-term operation (more than 10 days) of construction activities. The project Air Quality and Greenhouse Gas Study lists construction phase durations, all above 10 days (Appendix A, page 6). The grading work, for example, which the Noise Study analyses as a "high-intensity" construction scenario in Appendix B will last 43 days. Therefore, the 60 dB at residential structures county limit is more appropriate.

Impact Analyses are Incomplete

Construction Noise

The construction noise calculations use a minimum receptor distance of 50 feet, per cited LAMC threshold. However, multiple phases of ongoing construction activity, including grading work, may be as close as 6 feet from the adjacent residences, resulting in higher Lmax levels (108 dB).

RCM-1 (MND page 109) indicates the erecting of a noise barrier along the project boundaries. While the MND is correct that this could provide up to 15 dBA of reduction under optimistic circumstances, the barrier does not reduce predicted construction levels to below threshold of significance.

The calculations provided in Appendix B of the Noise Study use Spec Lmax reference levels for some equipment and Actual Lmax reference levels for others (per RCNM). This does not change the maximum predicted level, but it is unclear why these lower reference levels were selected.

A sample calculation taken from Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) is presented below compared to the MND analysis. Calculations were performed at 15516 Plummer Street, which is a single-family residence adjacent to the project site and 6 feet east of the project boundary.

[1] https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT12ENPR_CH12.08NOCO

Table 1: Modeled Lmax Construction Noise Levels at 15516 Plummer Street

Equipment	Spec Lmax Source Level at 50 ft (dBA)	Calculated Noise Level at 6 ft (dBA)	Calculated Noise Level with 12-ft Barrier (dBA)	County Noise Limit (dBA)	Impact?
Grader	85	103	88	60	YES
Excavator	85	103	88	60	YES
Concrete Saw	90	108	93	60	YES
Activity Lmax:			93	60	YES

Based on the calculations above, a 30+ dBA increase over the MND noise threshold would occur during construction. At such levels, more study in an EIR is required, and mitigation to reduce the impact is required.

On-Site Operations Noise

The MND does not provide quantitative analysis for noise from on-site operations such as activity in the play area, trash-hauling, or traffic noise and other activity during pick up/drop off along the driveway directly adjacent to residences. These activities may result in an increase of 5 dB or more over the ambient, especially if amplified sound is used in the play area.

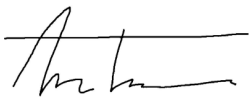
Conclusions

There are several errors and omissions in the MND noise analysis. Correcting these would potentially identify several significant impacts which require mitigation or an EIR.

Please feel free to contact me with any questions on this information.

Very truly yours,

WILSON IHRIG



Ani S. Toncheva
Senior Consultant

Wilson Ihrig Valor Elementary Noise A Toncheva 12142022.docx

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

ANI TONCHEVA

Senior Consultant

Since joining the firm in 2011, Ani has conducted analyses for transit systems, vibration sensitive research facilities, public infrastructure, construction, and other environmental noise. She has contributed to literature reviews, including research on current practices of historical preservation. She has extensive experience working on construction projects in New York City and is well versed in local noise codes.

Education

- B.A., Physics; Bard College, New York

Professional Associations

- *Member*, National Council of Acoustical Consultants (NCAC)
- *Member*, Acoustical Society of America (ASA)
- *Board Member,* Transportation Research Forum (TRF), NY Chapter and International board

Research Paper

- NCHRP 25-25, *Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects*

Relevant Experience

BART Berryessa Station Transit Noise Impact and Mitigation, San Jose, CA Assisted with noise predictions and barrier design recommendations.

Massachusetts Bay Transportation Authority (MBTA) Green Line Extension (GLX), Boston, MA Lead analyst on noise predictions and barrier design.

RTD Eagle P3 Northwest Corridor Noise and Impacts, Denver, CO Assisted with data analysis and helped prepare final technical report.

Alameda CTC, I-880 Interchange Improvements Project (Whipple Road-Industrial Southwest and Industrial Parkway West), Hayward, CA Project Manager for traffic noise study.

Alameda CTC, I-80/Ashby Avenue Interchange Improvements, Berkeley, CA Project Manager for traffic noise study.

Millennium Bulk Terminal, Longview, WA Prepared noise analysis for the project's NEPA and SEPA environmental impact statements.

Peninsula Humane Society & SPCA Haskin Hill Sanctuary, Loma Mar, CA Prepared an environmental study for a planned animal sanctuary in Loma Mar.

Analog (ArtX) Hotel, Palo Alto, CA Prepared preliminary basis of design guidelines for a new five-story boutique hotel in a residential area.

Sunnydale Block 3A & 3B Mixed-Use Residential Development, San Francisco, CA Prepared a CCR Title 24 Noise Study Report for two, mixed-use, 5-story buildings.

Columbia University Medical Center Medical and Graduate Education Building, New York, NY Conducted baseline noise survey and performed attended noise measurements during preliminary construction work.

Hudson Yards Tower C Foundations and Utilities, New York, NY Conducted a baseline noise survey prior to construction work including a combination of long-term unattended and short-term attended noise measurements.

PANYNJ Lincoln Tunnel Helix Rehabilitation, NJ Assisted in developing construction noise control and mitigation plan and implementing a remote long-term noise monitoring program at three locations.

MSK 74th Street, New York, NY Conducted baseline noise survey, assisted in developing construction noise control and mitigation plan, and implemented a long-term noise monitoring program at two locations.

NY MTA No. 7 Line Subway Extension Ventilation Facility Construction, New York, NY The project involved mining and lining of two shafts and construction of a 2-story ventilation building.

NY MTA ESA/LIRR Grand Central Terminal Fit-Out, New York, NY Prepared the Contractor's noise and vibration control plan updates for fit-out work conducted underground at the Grand Central Terminal Suburban Level.

San Francisco Planning Department, Alameda Street Wet Weather Tunnel and Folsom Area Sewer Improvement, San Francisco, CA Noise and vibration analysis for Folsom Area stormwater infrastructure improvements.

World Trade Center Vehicle Security Center, New York, NY Conducted baseline noise surveys, assisted in developing construction noise control plans, and implementing a remote long-term noise monitoring program.

50 Pine Street Condominiums, New York, NY
Project involved evaluating mechanical noise at residential dwelling units for NYC noise code

Uptown Newport, Newport Beach, CA
Evaluation of noise levels due to mechanical equipment at adjacent property.

EXHIBIT C

Date : 11/22/2022 12:40:26 PM
From : "Maria Reyes"
To : "Esther Ahn"
Cc : "Brenda Kahinju"
Subject : Re: SCH Number (New SCH Number)

Thank you!

On Tue, Nov 22, 2022 at 12:28 PM Esther Ahn <esther.ahn@lacity.org> wrote:

> Hi Maria,
>
> Yes, I double-checked and this MND does not apply to the Code sections listed. There are no features of the project with State or State-/Area-/Regional-wide significance as it is an elementary school located on 2 lots of an urbanized area.
>
> Thanks so much!
> Esther
>
> On Tue, Nov 22, 2022 at 12:16 PM Maria Reyes <maria.reyes@lacity.org> wrote:
>
> > Esther Please confirm that your MND does not apply to the code below? So that I can confirm with the state.
> >
> > ---------- Forwarded message ---------
> > From: **Meng Heu** <Meng.Heu@opr.ca.gov>
> > Date: Tue, Nov 22, 2022 at 12:13 PM
> > Subject: SCH Number (New SCH Number)
> > To: Maria L Reyes <maria.reyes@lacity.org>
> >
> > Hello,
> >
> > Thank you for your CEQA document submission. We noticed that you only included a local review period for your submission, but it seems like this project potentially falls under California Code of Regulations (CCR) Section 15205 – Review by State Agencies and/or CCR Section 15206 – Projects of Statewide, Regional, or Areawide Significance.
> >
> > If this does fall under CCR Section 15205 or 15206, we will need to include a State review period in addition to the local review period and also assign

relevant State agencies to review your project.

Can you please verify that your agency determined this project does *not* fall under either CCR Section 15205 or 15206?

Meng Heu

Office of Planning and Research (OPR)

State Clearing House

***Note*: No reply, response, or information provided constitutes legal advice.

To view your submission, use the following link.
https://ceqasubmit.opr.ca.gov/Document/Index/283314/1

--

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--

Esther Ahn
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--

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EXHIBIT 2

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February 21, 2022

VIA EMAIL
Commission President Millman and Commission Members
City Planning Commission
Email: cpc@lacity.org

Esther Ahn, Planner
Email: esther.ahn@lacity.org

Re: Agenda Item 7: - Valor Elementary School Project, Case No. CPC-2022-5865-CU-SPR, CEQA No. ENV-2022-5866-MND

Dear Commission President Millman, Commission Members, and Ms. Ahn:

This letter is submitted on behalf of Coalition for Responsible Equitable Economic Development Los Angeles ("CREED LA") regarding Agenda Item 7, the Valor Elementary School Project, Case No. CPC-2022-5865-CU-SPR, CEQA No. ENV-2022-5866-MND ("project") proposed by Bright Star Schools ("Applicant").

On December 14, 2022, CREED LA submitted comments to the Department of Planning on the Mitigated Negative Declaration[1] ("MND") prepared for the Project pursuant to the California Environmental Quality Act ("CEQA")[2] by the City of Los Angeles ("City"). Our comments explained that the City failed to comply with CEQA by failing to accurately disclose the extent of the Project's potentially significant impacts on air quality, public health, hazards, public services, and noise, and that there is more than a fair argument that the Project will result in significant, unmitigated impacts in each of these areas.

On February 15, 2023 the City released a Recommendation Report for the Project which contains responses to our comments from Planning Department staff

[1] City of Los Angeles, Mitigated Negative Declaration, Valor Elementary School Project ("MND") Case No: ENV-2022-5866-MND (November 2022) available at https://planning.lacity.org/odocument/4665dfef-ecad-42b5-80b6-575ca5e17851/ENV-2022-5866.pdf
[2] Public Resources Code § 21000 *et seq.*; 14 Cal. Code Regs. ("C.C.R.") §§ 15000 *et seq.*

and the Applicant's consultant, Rincon Consultants Inc.[3] The City's responses fail to resolve the majority of issues raised in CREED LA's MND comments. This letter addresses the responses to comments contained in the Recommendation Report and Rincon Report. Air quality and hazards expert James Clark, Ph.D and noise expert Ani Toncheva also provided responses to the Recommendation Report, attached to this letter as Attachments A and B respectively.[4] In sum, these comments show that the City does not provide substantial evidence to justify reliance on an MND, that substantial evidence remains in the record demonstrating that the Project has significant, unmitigated impacts, and the Planning Commission cannot make the findings required to approve the Project under the City's municipal code. [5]

For the reasons discussed in our herein, in our previous letter, and the attached expert comments, CREED LA urges the Commission to remand the Project to staff so that they can correct the deficiencies in the MND by preparing a legally adequate EIR and recirculating it for public review and comment before the Project can be considered for approval.[6]

A. The City Must Prepare a Preliminary Endangerment Assessment Pursuant to the California Education Code.

In our comments on the MND, we noted that the City failed to consult with the Department of Toxic Substances Control ("DTSC") and prepare a Preliminary Endangerment Assessment ("PEA") for the Project. In response, the City states that the California Education Code section 47610 exempts charter schools from many provisions of the Education Code including the requirement to consult with DTSC.[7] However, when a charter school receives funds from the state to construct or improve its buildings under the Charter School Facilities Program ("CSFP"), the

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[3] Department of City Planning, Recommendation Report, Valor Elementary School Final IS-MND (ENV-202205866-MND) (February 23, 2023) available at https://planning.lacity.org/plndoc/Staff_Reports/2023/02-23-2023/CPC_2022_5865.pdf; see also Exhibit E, Rincon Consultants, Responses to CREED LA Comment Letter Dated December 14, 2022 (February 9, 2023) (hereinafter "Rincon") beginning at pdf. p. 239.

[4] **Attachment A:** Comments on Valor Elementary School Project (February 20, 2023) ("Clark Comments"); **Attachment B:** Comments on Valor Elementary School Project Responses (February 21, 2023) ("Wilson Ihrig Comments").

[5] Pub. Res. Code § 21081; *Covington v. Great Basin Unified Air Pollution Control Dist*. (2019) 43 Cal.App.5th 867, 883.

[6] We reserve the right to supplement these comments at later hearings on this Project. Gov. Code § 65009(b); Public Resources Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199–1203; *see Galante Vineyards v. Monterey Water Dist*. (1997) 60 Cal.App.4th 1109, 1121.

[7] Rincon, Response 4.1, p. 3.

school is subject to additional requirements, including the requirements to consult with DTSC.

The CSFP was enacted in 2002 by Assembly Bill 14, amended by Senate Bill 15 and Assembly Bill 16, and funded through Proposition 47, Proposition 55, Proposition 1D, and Proposition 51, for the purposes of constructing, acquiring, or renovating new facilities for site-based charter school students throughout California.[8] The CSFP is codified in Education Code Chapter 12.5 section 17078.52.[9] The CSFP allows charter schools to access state facility funding for new construction directly or through the school district where the charter school is physically located. The program funds 50 percent of project costs as a grant (paid by the State), while the charter school, in the form of a long-term lease or a lump sum payment, repays the remaining 50 percent.[10]

As a condition of receiving state funding pursuant to Chapter 12.5, a charter school must complete the three-step process outlined in Education Code § 17213.1 and assess whether there has been a release of hazardous waste at a school site.[11] As explained in our prior comments, process requires consultation with DTSC and to enter into an Environmental Oversight Agreement with DTSC, then contract with a qualified environmental consultant to prepare an assessment according to DTSC guidelines.[12]

Bright Star Schools' 2022-2023 budget audit report states that it received Proposition 1D grants which are categorized as "Proposition Construction Revenue" in the budget.[13] Based on the Audit Report it appears that Bright Star Schools intends to use the funds from the Proposition 1D grants to fund school construction projects such as the Project here, noting that $26,971,711 in assets are restricted for construction.[14] Because the funds are made available through Education Code Chapter 12.5, then, in order to use these funds for Project construction, Bright Star Schools is required to comply with Education Code § 17213.1 and consult with DTSC regarding the Project's potential health risks to students.

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[8] California State Treasurer's Office, School Finance Authority, Charter School Facilities Program Overview (2023) ("STO Overview") available at https://www.treasurer.ca.gov/csfa/charter.asp
[9] Ed. Code, § 17078.52.
[10] STO Overview (2023).
[11] Ed. Code §17213.1 *see also* DTSC, Environmental Assessments For Charter School Sites Fact Sheet available at https://dtsc.ca.gov/environmental-assessments-for-charter-school-sites-fact-sheet/
[12] Ed. Code §17213.1(a)(4)(B).
[13] Bright Star Schools, 2022-2023 Budget Report on the Financial Statement ("Auditor's Report") (June 30, 2022) p. 11. Available at https://brightstarschools.org/files/galleries/2022_Audited_Financials.pdf
[14] Auditor's Report, p. 7.

The City failed to consult with DTSC in violation of the Education Code. Additionally, based on the results of the Phase I completed for the Project, there is a fair argument that if the City had consulted with DTSC, a PEA would be required. The Planning Commission must continue the hearing until consultation with DTSC is completed, and prepare and circulate a revised CEQA document which includes the results of the consultation and any subsequent PEA prepared for the Project.

B. There is Substantial Evidence Supporting a Fair Argument That the Project Will Result in Significant, Unmitigated Health Risks from Exposure to Freeway Emissions

As explained in our initial comments and herein, the City failed to analyze the background risk from air pollution in the Project area. Development of the Project will place children and staff in an area of high air pollution concentrations. In his review of the Recommendation Report and Responses, Dr. Clark found that the cumulative cancer risk from air pollutants in the area of the project is 413 in 1,000,000.[15] Diesel particulate matter ("DPM") accounts for approximately 65 percent of that risk or 268 in 1,000,000, while the 145 in 1,000,000 comes from benzene, formaldehyde and other gasses which will not be treated with the MERV filters.[16] Assuming that the MERV 13 filters at the site reduce the cancer risk from DPM by 90 percent, the cumulative risk to students and staff will still exceed the SCAQMD threshold of 100 in 1,000,000, resulting in a significant impact. The Responses fail to include additional mitigation such as measures requiring the Project to minimize the amount of time the students spend outside to limit exposure. The City must prepare an EIR which includes additional mitigation measures to protect students and staff or contain the findings necessary to justify a statement of overriding considerations if the risk cannot be mitigated to below the threshold.

C. There is Substantial Evidence Supporting a Fair Argument That the Project Will Result in Significant, Unmitigated Noise Impacts

We previously commented that the long term noise measurement taken for the Project failed to document the changes in the noise environment that occur through the day because the measurement was taken at the back of the Project site where it is partially shielded from both nearby streets and does not capture traffic

[15] Clark Letter, p. 1.
[16] Clark Letter, p. 2.

patterns at residences close to Plummer Street. The City's Response 5.1 states that this was done on purpose and results in a more conservative analysis to measure project noise against.[17] However, Ms. Toncheva found that the long-term measurement location still fails to adequately document the existing noise impacts to all sensitive receptor locations nearby the Project site, including those along Plummer Street, adjacent to the Project site. Additional measurement and analysis is required to characterize the existing noise environment at the Project site.

Additionally, the City provides new information regarding the Project's operational noise, stating that the Project will not employ bells or an outdoor paging system.[18] However, the City failed to quantify the Project's operational noise and therefore lacks substantial evidence to conclude that the Project will not have a significant impact. Furthermore, Ms. Toncheva found that, while the Project buildings will shield receptors to the west and south, the residence to the east of the site is not shielded and may be exposed to reflections of Project noise.[19]

Ms. Toncheva concludes that the Project's construction and operational noise impacts remain significant and unmitigated notwithstanding the mitigation measures proposed in the MND and the Project's conditions of approval. Ms. Toncheva's comments provide substantial evidence supporting a fair argument that an EIR is required to accurately disclose and mitigate these impacts.

D. The MND Fails to Account for the Public Services That Will Be Needed to Support the Project

The Responses fail to address whether consultation with LAPD will result in changes to the Project design or require additional police services to support the Project. An MND must consider the effect of changes to the environment that can result from the expansion of services.[20] Here, the MND states that the Project would not place an unanticipated burden on police protection services.[21] However, the MND and responses fail to include any information or analysis on how this conclusion was reached.

As detailed in our previous comments, the City failed to proceed in the manner required by law by failing analyze consistency with the Community Plan's public protection policies and lacks substantial evidence to support its conclusion

[17] Rincon, p. 8.
[18] Recommendation Report, p. C-6.
[19] Wilson Ihrig, p .2.
[20] *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553.
[21] MND, p. 116.

that the Project's public services impacts would be less than significant. The responses fail to meaningfully respond to CREED LA's prior comments. The City must complete the required consultation with LAPD and analyze the environmental impacts of any required Project design changes to the Project in an EIR.

II. THE CITY LACKS SUBSTANTIAL EVIDENCE TO APPROVE THE PROJECT'S LOCAL LAND USE PERMITS

A. The City Cannot Approve the Project's Conditional Use Permit

The Project seeks approval of a Conditional Use Permit to allow development of a public school in the RA-1 zone ("CUP") pursuant to LAMC § 12.24.[22] The MND fails to accurately disclose and mitigate significant impacts, as discussed herein. Therefore, the Project fails to meet the LAMC requirements to obtain a CUP. LAMC § 12.24(E)(2) and (3) require "that the project's location, size, height, operations and other significant features will be compatible with and will not adversely affect or further degrade adjacent properties, the surrounding neighborhood, or the public health, welfare, and safety" and that the Project "conforms with the purpose, intent and provisions of the General Plan, the applicable community plan". The Project as analyzed above **will** adversely affect public health due to the Project's proximity to I-405 and the unmitigated impacts to future students and school staff, **will** adversely affect adjacent properties due to unmitigated noise impacts and, and **does not** conform with the applicable community plan by failing to consult with LAPD prior to Project approval.

III. CONCLUSION

For the reasons stated herein and in our prior comments and the comments of CREED LA's experts, CREED LA respectfully requests that the City Planning Commission remand the Project to staff and direct staff to prepare an EIR for the Project.

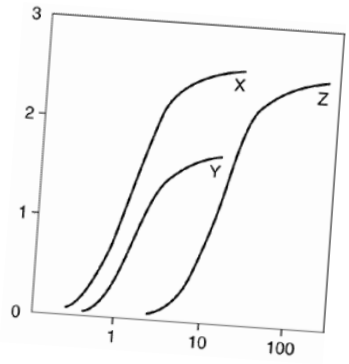
Sincerely,

Kevin Carmichael

KTC:ljl

[22] LAMC § 12.24(U)(24).

ATTACHMENT A



Clark & Associates
Environmental Consulting, Inc.

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Los Angeles, CA 90066

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310-907-6165

FAX
310-398-7626

EMAIL
jclark.assoc@gmail.com

February 20, 2023

Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Attn: Mr. Kevin Carmichael

Subject: : Comments On Staff Recommendation Report Of Initial Study/Mitigated Negative Declaration (IS/MND) For Valor Elementary School Project, Los Angeles, CA 91343 Case Number: ENV-2022-5866-MND

Dear Mr. Carmichael:

At the request of Adams Broadwell Joseph & Cardozo (ABJC), Clark and Associates (Clark) has reviewed materials related to the 2022 City of Los Angeles' (the City's) Staff Recommendation Report regarding the above referenced project.

Clark's review of the materials in no way constitutes a validation of the conclusions or materials contained within the plan.

The Staff's analysis ignores the substantial evidence previously detailed to them in my comment letter that mitigation measures outlined by the Proponent (installation of MERV 13 filtration system) to reduce the cumulative air quality impacts fail to protect the students and staff a clearly unacceptable risk. According to the Multiple Air Toxics Exposure Study V (MATES V) published by the South Coast Air Quality Management District (SCAQMD) in August 2021, air quality modeling of sources in the vicinity of the Project (including Interstate 405) lead to a cumulative risk from air toxins of 413 in 1,000,000 for the Project site.

The risk drivers in the area included diesel particulate matter (DPM), arsenic, benzene, formaldehyde, and other air toxins. Diesel particulate matter (DPM) accounts for 65% of the risk (268 out of the 413 calculated). MERV 13 technology reduces particulate matter and not vapors/gases. The remaining risk from air pollutants (145 out of the 413) is from benzene, formaldehyde and other gases. Assuming that the Proponent's estimates that 90% (as outlined by IS/MND) of the DPM risk is controlled by the mitigation measure, it is clear that the Project will be exposing sensitive receptors (students and staff) to risks in excess of 100 in 1,000,000. The City must re-evaluate the significant impacts identified in this letter by requiring the preparation of a revised DEIR and outline additional measures to protect the staff and students from their exposure to air toxins that will not be controlled by the planned mitigation measure.

Sincerely,

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA
WASHINGTON
NEW YORK

WI #22-005.35

February 21, 2023

Kevin T. Carmichael
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

SUBJECT: Comments on Valor Elementary School Project Noise and Vibration Study, Follow-up Comments on Response to Public Comments

Dear Mr. Carmichael,

Wilson Ihrig has reviewed the Staff Report prepared for the Valor Elementary School Project hearing before the Los Angeles Planning Commission on February 23, 2023, including responses to comments prepared by Rincon Consultants, Inc. on behalf of the Project applicant, dated February 9, 2023. Following are further comments or clarifications.

Response 5.1

As stated in our initial comments, LT1 is shielded from traffic noise and the relatively flat hourly noise levels reported in Table 19 do not appear to capture the range of time-varying traffic noise patterns at the residences **close** to Plummer Street. We agree that the long-term measurement (LT1) captures the lowest ambient noise level at sensitive receivers near the project and that a 24-hour noise measurement can capture traffic noise changes from hour to hour. However, the existing noise impacts from Plummer are not adequately documented with the results from LT1.

Per Section I.2 of the LA CEQA Threshold Guide, significance thresholds for operational noise are contingent on the CNEL of the affected land uses. Therefore, the discussion should be updated to address how the selected measurement locations characterize the existing noise environment at all residential land uses nearest the project.

Response 5.3

The MND lacks evidence (calculations) to verify that a 15 dB reduction will result from the noise barrier described in mitigation measure RCM-1.

Response 5.4

We note that the response provides additional information on the school operation hours and confirms that there will be no PA system installed. The MND must provide evidence (quantitative calculations) to verify that on-site operations noise will not result in a significant increase over ambient levels. Many of the homes near the site will be shielded from play area activities, per the project site plan in Figure 4 in the MND. However, the residence East of the site at 15508 Plummer Street, is not shielded from play areas and may be exposed to reflections from the proposed building configuration. Please provide calculations showing expected operation noise levels at the residences.

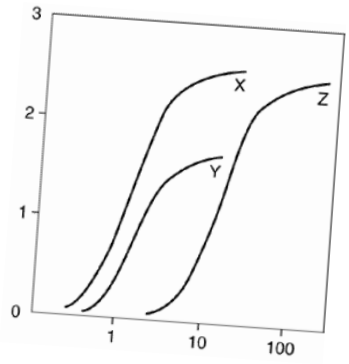
Please feel free to contact me with any questions on this information.

Very truly yours,

WILSON IHRIG

Ani S. Toncheva
Senior Consultant

EXHIBIT A



Clark & Associates
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February 20, 2023

Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Attn: Mr. Kevin Carmichael

Subject: : Comments On Staff Recommendation Report Of Initial Study/Mitigated Negative Declaration (IS/MND) For Valor Elementary School Project, Los Angeles, CA 91343 Case Number: ENV-2022-5866-MND

Dear Mr. Carmichael:

At the request of Adams Broadwell Joseph & Cardozo (ABJC), Clark and Associates (Clark) has reviewed materials related to the 2022 City of Los Angeles' (the City's) Staff Recommendation Report regarding the above referenced project.

Clark's review of the materials in no way constitutes a validation of the conclusions or materials contained within the plan.

The Staff's analysis ignores the substantial evidence previously detailed to them in my comment letter that mitigation measures outlined by the Proponent (installation of MERV 13 filtration system) to reduce the cumulative air quality impacts fail to protect the students and staff a clearly unacceptable risk. According to the Multiple Air Toxics Exposure Study V (MATES V) published by the South Coast Air Quality Management District (SCAQMD) in August 2021, air quality modeling of sources in the vicinity of the Project (including Interstate 405) lead to a cumulative risk from air toxins of 413 in 1,000,000 for the Project site.

The risk drivers in the area included diesel particulate matter (DPM), arsenic, benzene, formaldehyde, and other air toxins. Diesel particulate matter (DPM) accounts for 65% of the risk (268 out of the 413 calculated). MERV 13 technology reduces particulate matter and not vapors/gases. The remaining risk from air pollutants (145 out of the 413) is from benzene, formaldehyde and other gases. Assuming that the Proponent's estimates that 90% (as outlined by IS/MND) of the DPM risk is controlled by the mitigation measure, it is clear that the Project will be exposing sensitive receptors (students and staff) to risks in excess of 100 in 1,000,000. The City must re-evaluate the significant impacts identified in this letter by requiring the preparation of a revised DEIR and outline additional measures to protect the staff and students from their exposure to air toxins that will not be controlled by the planned mitigation measure.

Sincerely,

EXHIBIT B

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA
WASHINGTON
NEW YORK

WI #22-005.35

February 21, 2023

Kevin T. Carmichael
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

SUBJECT: Comments on Valor Elementary School Project Noise and Vibration Study, Follow-up Comments on Response to Public Comments

Dear Mr. Carmichael,

Wilson Ihrig has reviewed the Staff Report prepared for the Valor Elementary School Project hearing before the Los Angeles Planning Commission on February 23, 2023, including responses to comments prepared by Rincon Consultants, Inc. on behalf of the Project applicant, dated February 9, 2023. Following are further comments or clarifications.

Response 5.1

As stated in our initial comments, LT1 is shielded from traffic noise and the relatively flat hourly noise levels reported in Table 19 do not appear to capture the range of time-varying traffic noise patterns at the residences **close** to Plummer Street. We agree that the long-term measurement (LT1) captures the lowest ambient noise level at sensitive receivers near the project and that a 24-hour noise measurement can capture traffic noise changes from hour to hour. However, the existing noise impacts from Plummer are not adequately documented with the results from LT1.

Per Section I.2 of the LA CEQA Threshold Guide, significance thresholds for operational noise are contingent on the CNEL of the affected land uses. Therefore, the discussion should be updated to address how the selected measurement locations characterize the existing noise environment at all residential land uses nearest the project.

Response 5.3

The MND lacks evidence (calculations) to verify that a 15 dB reduction will result from the noise barrier described in mitigation measure RCM-1.

Response 5.4

We note that the response provides additional information on the school operation hours and confirms that there will be no PA system installed. The MND must provide evidence (quantitative calculations) to verify that on-site operations noise will not result in a significant increase over ambient levels. Many of the homes near the site will be shielded from play area activities, per the project site plan in Figure 4 in the MND. However, the residence East of the site at 15508 Plummer Street, is not shielded from play areas and may be exposed to reflections from the proposed building configuration. Please provide calculations showing expected operation noise levels at the residences.

Please feel free to contact me with any questions on this information.

Very truly yours,

WILSON IHRIG

Ani S. Toncheva
Senior Consultant