



Yana Garcia
Secretary for
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Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
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Gavin Newsom
Governor

SENT VIA ELECTRONIC MAIL

June 27, 2023

Mr. Nicholas Arps
Director of Facilities, Construction & Modernization
San Juan Unified School District
3738 Walnut Avenue
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Nicholas.Arps@sanjuan.edu

DTSC COMMENT LETTER - REVISED DRAFT PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT, SAN JUAN UNIFIED SCHOOL DISTRICT, CREEKSIDE ADULT CENTER/KATHERINE JOHNSON MIDDLE SCHOOL, 2641 KENT DRIVE, SACRAMENTO, SACRAMENTO COUNTY, CALIFORNIA (PROJECT CODE: 104858)

Dear Mr. Arps:

The Department of Toxic Substances Control (DTSC) reviewed the revised *Draft Preliminary Endangerment Assessment Report* (Draft PEA Report – AECOM Technical Services, Inc., June 7, 2023) received on June 7, 2023 via electronic mail. The Draft PEA Report presents investigation results and conclusions based on a human health risk assessment for the 9.75-acre property located at 2641 Kent Drive, Sacramento, California, 95821 (Site).

DTSC has identified issues in the Draft PEA Report that require clarification and/or modifications to the report. DTSC comments on the Draft PEA Report are enclosed. Please submit an electronic copy of a revised PEA report within 14 days of the date of this letter. After DTSC approves the PEA Report, one bound copy of the final revised PEA Report and an electronic copy shall be submitted for DTSC.

The San Juan Unified School District (District) made the draft PEA Report available for public review and comment pursuant to Option A of the California Education Code Section 17213.1(a)(6)(A) between April 19, 2023 and May 19, 2023. As such, this letter, our enclosed comments, and the final revised PEA Report with responsiveness

Mr. Nicholas Arps

June 27, 2023

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summary, should be made available to the public in the established information repositories.

If you have any questions regarding this letter, please contact me at (916) 255-6523 or via email at Lisa.Holcomb@dtsc.ca.gov.

Sincerely,



Lisa Holcomb
Project Manager
Northern California Schools Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

Enclosures (2): *DTSC Comments: Draft PEA Report*
 HERO Memorandum dated June 22, 2023

cc: (via email)

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DTSC COMMENTS
DRAFT PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT
CREEKSIDE ADULT CENTER/KATHERINE JOHNSON MIDDLE SCHOOL
SAN JUAN UNIFIED SCHOOL DISTRICT
SACRAMENTO, SACRAMENTO COUNTY
PROJECT CODE 104858

According to the *Draft Preliminary Endangerment Assessment Report* (Draft PEA Report – AECOM Technical Services, Inc., April 18, 2023), the San Juan Unified School District (District) is proposing to construct a new middle school to be located at 2641 Kent Drive, Sacramento, Sacramento County, California (Site). The Site is further identified by the Sacramento County Assessor's Office as Assessor's Parcel Number 268-0290-001. The Site is approximately 9.75 acres. The Site is owned by the District. When completed, the proposed middle school will include 28 classrooms to accommodate 650 students. Water and sewer services will be provided by the City of Sacramento Department of Utilities.

According to aerial photographs, the Site was vacant, undeveloped property from 1937 to approximately 1953 – possibly used for either dryland farming or pastureland. It has been developed since at least 1953 through present day as an elementary school, head-start program/pre-school, and most recently, an adult education center. Basketball courts, tennis courts, a baseball field and parking lots were constructed between the 1950s and 1970s. The Site is currently under construction for the Katherine Johnson Middle School, supporting no existing or previous structures at the time of this writing.

The Site is bounded to the north by Creekside Park followed by single- and multi-family residences; to the east by single-family residences, followed by Cumberland Road; to the south by Creekside Preschool and Infant Center and single- and multi-family residences, followed by El Camino Avenue; and to the west by Belpoint Lane, beyond which are single- and multi-family residences.

The PEA Workplan includes activities to investigate the Site for potential impacts from the following environmental conditions that may pose a threat to human health or the environment:

- Lead in soils from the potential weathering of lead-based paint applications on structures.
- Arsenic and organochlorine pesticides (OCPs) in soils from potential historical agricultural pesticide or herbicide use.
- Polychlorinated biphenyls (PCBs) in soils from the potential weathering of caulking materials around exterior windows and doorframes of previous buildings.

- PCBs potentially used in electrical transformers installed prior to 1979.
- Metals, petroleum hydrocarbons and volatile organic compounds (VOCs) in soils near a storage shed.
- VOCs in soil gas based on the Site's vicinity to a former dry cleaner approximately 560 feet to the south of the Site.

The Draft PEA Report includes a human health screening evaluation (HHSE) to estimate the potential chronic health hazard from contamination found at the Site by comparing maximum detected concentrations in on-site soil and soil gas to residential soil and indoor air screening levels (SLs) established by the Department of Toxic Substances Control (DTSC), the San Francisco Bay Regional Water Quality Control Board (SFRWQCB), and/or the United States Environmental Protection Agency (USEPA) regional screening levels (RSLs) as applicable.

The Draft PEA Report recommends the installation of a soil vapor barrier beneath the foundations of the proposed school buildings to mitigate potential vapor intrusion.

The following Department of Toxic Substances Control (DTSC) staff reviewed and provided comments herein to the PEA Report. A memorandum dated June 22, 2023 from DTSC's Human and Ecological Risk Office is included as Attachment A. Please contact the DTSC Project Manager if you have any questions regarding the comments.

Lisa Holcomb
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Northern California Schools Unit
Department of Toxic Substances Control
Lisa.Holcomb@dtsc.ca.gov

Alicia Taylor, PhD
Staff Toxicologist
Human and Ecological Risk Office
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GENERAL COMMENTS

1. The response to comments and cover letter for the revised document should indicate and identify any changes and/or modifications made to the revised document not requested specifically in the comments below.
2. Specific comments generally reference a specific occurrence, it is the responsibility of the consultant to ensure that each occurrence be identified and corrected throughout the document as appropriate.
3. Once DTSC has issued notice to submit the revised document, please provide an electronic copy of the revised document in portable document format (PDF) without

password protection, in a file size no more than 100-megabytes. Please use a searchable form of Adobe Acrobat to facilitate review of the revised document and future PDF document submittals. Signature pages must be included and have either original or electronic signature. An electronic copy of the revised/final document will be posted on the DTSC EnviroStor database public access web site.

SPECIFIC COMMENTS

1. Page 3-1, Section 3 Subject Property Location and Description: The assessor's map is not included in Appendix A of the Draft PEA Report.
2. Page 9-1, Section 9.2 Public Comment Period and Public Hearing, second paragraph: Please remove Lisa Holcomb as a point of contact for comments.
3. Appendix D is missing a public comment and response.

ATTACHMENT A
PRELIMINARY ENDANGERMENT ASSESSMENT REPORT
HERO MEMORADUM, JUNE 22, 2023



Yana Garcia
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
700 Heinz Avenue
Berkeley, California 94710-2721



Gavin Newsom
Governor

MEMORANDUM

TO: Lisa Holcomb
Project Manager
Department of Toxic Substances Control
Sacramento, California

FROM: Alicia Taylor, Ph.D.
Staff Toxicologist
Human and Ecological Risk Office (HERO)

DATE: June 22, 2023

SUBJECT: PRELIMINARY ENDANGERMENT ASSESSMENT REPORT
KATHERINE JOHNSON MIDDLE SCHOOL / CREEKSIDE ADULT
CENTER - 2641 KENT DRIVE, SACRAMENTO, CALIFORNIA

Activity: 12018

Project: 104858-11

MPC: PEA

DOCUMENTS REVIEWED

Final Preliminary Environmental Assessment (PEA), Proposed Katherine Johnson Middle School, 2641 Kent Drive Sacramento, California, dated June 6, 2023 and prepared by AECOM (Sacramento, California).

SCOPE OF REVIEW

HERO reviewed the above document for scientific content relevant to human health risk assessment. Any future changes or additions to the document should be clearly identified.

Please refer to the [HERO website](https://dtsc.ca.gov/human-health-risk-hero/) (https://dtsc.ca.gov/human-health-risk-hero/) for the most up to date versions of our Human Health Risk Assessment (HHRA) Notes and other related guidance documents.

BACKGROUND

The Site is 9.75-acres and is located at 2641 Kent Drive in Sacramento, California. At least six buildings onsite were developed as early as 1953 and have been used for an elementary school and for an adult center. Additional structures previously onsite include a storage shed, portables, and a dedicated structure for restrooms. Prior to 1950, the Site was used for agriculture. The Site is located in a residential area with a daycare next door. A slough is along the northern border of the Site. A dry-cleaner was operated approximately 560 feet to the south of the Site since 1965, but it is not clear when the dry-cleaning operation stopped. Groundwater located 1,500 feet to the southwest of the Site was measured at 94 to 96 feet below ground surface (ft bgs) in 2009; groundwater flow is to the southwest.

During the Preliminary Endangerment Assessment (PEA), two volatile organic compounds (VOCs) were detected above residential screening levels (SLs) in soil gas samples. Benzene was reported at a range of 3.9 to 14 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) between 5 and 10 feet below ground surface (ft bgs), which is above the 0.097 $\mu\text{g}/\text{m}^3$ default residential screening level (SL) with a 0.03 attenuation factor (AF). Tetrachloroethylene (PCE) was reported to be as high as 19 $\mu\text{g}/\text{m}^3$ at 10 ft bgs, which is above the default residential SL of 0.46 $\mu\text{g}/\text{m}^3$ with an applied 0.03 AF.

Ten additional soil gas samples that target the locations of the future proposed school buildings were previously proposed as part of a Supplemental Site Investigation. These data were collected at the Site in April and May 2023, and are included in the current version of the PEA Report.

GENERAL COMMENTS

HERO reviewed the revised PEA Report relative to the comments provided in the HERO memo from A. Taylor to L. Holcomb dated May 4, 2023. The following comments use the same numbering system found in the HERO May 4, 2023 memo.

1. Cumulative Cancer Risk: In the Executive Summary, the cancer risk is stated as being less than 1×10^{-6} and is therefore considered acceptable. Rather, the 3×10^{-4} estimated in the PEA for cumulative potential cancer risk is greater than 1×10^{-6} and is not considered acceptable. When cancer risk is calculated for only soil gas using default assumptions, the calculated residential risk ranges between

1.1×10^{-4} to 1.4×10^{-4} , depending on soil depth (5 or 10 ft bgs). In addition, the residential hazard index is 18.

Based on the soil gas data and cumulative residential cancer risk specific to soil gas, HERO agrees with the determination of further action for the Site and supports an additional investigation of soil gas. HERO requests that the cumulative risk is updated once additional soil gas data is available. In addition, updates to the text should be made where the cumulative risk is noted as below DTSC's point of departure.

HERO Response: HERO notes that residential cumulative risk from the April 2023 version of the PEA Report was 3.4×10^{-4} and the updated cumulative risk in the June 2023 PEA Report is now 4.0×10^{-8} . The original hazard index was 18, and the updated hazard index is now 3. HERO also finds that in the June 2023 PEA Report, the residential cancer risk for soil and soil vapor are calculated separately. HERO did not find a description in the text for the current soil vapor intrusion to indoor air risk, which has a cumulative risk of 5×10^{-5} , and is considered an unacceptable level of risk.

HERO requests that a detailed response to comment document is provided that describes the changes made in the cumulative risk assessment between the April 2023 and June 2023 PEA Reports.

Please see the new comment (Comment #4) that addresses the soil vapor risk.

2. Organochlorine Pesticides from Termiticides: Termiticides are the primary source of organochlorine pesticides (OCPs) around building structures at the Site, therefore, higher OCP concentrations could be anticipated at depth. This is due to the method of application around building perimeters, which was to inject OCPs to a depth of approximately two to three ft bgs. The potential presence of OCPs should be vertically characterized at two and three ft bgs until clean soil is identified. When termiticides are suspected of being previously used at a Site, HERO will recommend that proposed soil samples for OCPs around structures are zero to six inches and 24-36 inches, instead of only zero to six inches. Currently, only a six-inch depth was investigated around buildings for OCPs. HERO recommends reviewing [DTSC's guidance on termiticide evaluation](#) (revised 2006). HERO recommends that the deeper depths are sampled for OCPs. If OCPs are not a concern at the Site, HERO requests that a rationale is provided on why additional OCP sampling is not necessary.

HERO Response: HERO still recommends that additional samples for OCPs are collected around structures at a depth of two to three ft bgs in a future Supplemental Site Investigation.

3. Ecological Receptors: HERO recommends a DTSC ecotoxicologist is consulted on potentially complete exposure pathways to ecological receptors, given the proximity of the slough.

HERO Response: HERO defers to the Project Manager to review potentially complete exposure pathways to ecological receptors.

4. Soil Vapor and Proposed Vapor Intrusion Mitigation System (VIMS): HERO finds that no significant releases of volatile organic compounds (VOCs) occurred at the Site based on site history. A dry cleaner was previously located near the Site (approximately 560 ft to the south). Elevated concentrations of volatile organic compounds (VOCs) such as PCE, trichloroethene (TCE), benzene, total petroleum hydrocarbons, and chloroform have been detected onsite in soil vapor at 5 and 10 ft bgs (chloroform detected only at 5 ft bgs). HERO notes that this is a new comment, which was not previously found in the HERO May 4, 2023 memo. HERO has the following comments regarding soil vapor intrusion:
 - a. Additional Soil Vapor (SV) Sampling: HERO notes that the June 2023 PEA Report shows additional soil vapor data collected on April 28, 2023 and May 1, 2023. These additional sampling locations were submitted as part of the April 2023 PEA Report and were proposed as a Supplemental Site Investigation. The new SV data are presented in the June 2023 PEA Report.
 - b. Use of DTSC Screening Levels: HERO requests that Table 5 is updated with DTSC Screening Levels (SLs), rather than using the San Francisco Regional Water Quality Control Board's Environmental Screening Levels (ESLs). DTSC SLs should also be used in the cumulative risk assessment.
 - c. Use of 0.001 Attenuation Factor: A bioattenuation factor for petroleum hydrocarbons may be applied if data for oxygen in soil gas is available, per Attachment 2 of the [February 2023 Supplemental Guidance: Screening and Evaluation of Vapor Intrusion](https://dtsc.ca.gov/wp-content/uploads/sites/31/2023/02/VI_SupGuid_Screening-Evaluating.pdf?emrc=a47a35), available at https://dtsc.ca.gov/wp-content/uploads/sites/31/2023/02/VI_SupGuid_Screening-Evaluating.pdf?emrc=a47a35.

Therefore, application of a bioattenuation Factor (BAF) for petroleum hydrocarbons may result in vapor concentrations being below DTSC SLs. For use of a 0.001 AF, data for oxygen content in soil vapor needs to be presented in the PEA Report.

If the Site meets the oxygen requirements, then HERO also requests that Table 5 is updated to present DTSC SLs with applied bioattenuation factor for petroleum hydrocarbons and a 0.03 AF for all other chemicals. The cumulative risk assessment should then be updated accordingly.

- d. Vapor Intrusion Mitigation System (VIMS) Recommendation: The June 2023 PEA Report recommends a soil vapor barrier beneath foundations of the proposed buildings. For any voluntary or stipulated VIMS at the Site, HERO recommends incorporating sub-slab vapor probes into the future VIMS design for performance monitoring. HERO recommends the VIMS design details should be evaluated by DTSC's Engineering and Special Projects Office.

SUMMARY

HERO requests that the above comments are addressed and that a revised PEA Report is resubmitted for DTSC's review. For Comment #1, HERO requests a tabulated "response to comment" style detailed description for the changes to the cumulative risk assessment. In addition, HERO recommends termiticide samples at a second, deeper depth per the termiticide guidance.

Please contact me at alicia.taylor@dtsc.ca.gov if you have questions regarding this review or pertinent risk-based decisions.

Review: Vivek Mathrani, Ph.D., DABT
Staff Toxicologist
Human and Ecological Risk Office



Concur: Claudio Sorrentino, Ph.D.
Senior Toxicologist
Human and Ecological Risk Office

