

**ENGINEERING EVALUATION
AUTHORITY TO CONSTRUCT**

Facility Name: DDT LLC

Application Number: APCD2024-APP-008106_8125
Equipment Type: [08C] - Cement Silo

Facility ID: APCD2020-SITE-03434

Equipment Address: 12125 Lakeside Ave.
Lakeside, CA 92040

Facility Contact: Ryan Spirz (Facility Contact/Application Preparer)
(619) 726-3815
rspirz@sbgec.com

6/6/2024

X Austin Stein

Austin Stein
Jr. Air Pollution Control Engineer
Signed by: E100885

Permit Engineer:

X

Nicholas Horres
Senior Air Pollution Control Engineer

Senior Engineer Signature:

1.0 BACKGROUND

- 1.1** Type of Application – Two (2) existing unpermitted cement silos
- 1.2** Permit History – This is the initial application for this equipment. These applications are part of the same project (APCD2024-APP-008106_8125). There are no other open applications or active permits at this site.
- 1.3** Facility Description – Construction company
- 1.4** Other Background Information – The facility has one closed NOV from 2020 (APCD2020-NOV-000669) and a recent, currently open NOV (APCD2024-NOV-000092). Both violations are for operating the equipment being proposed in this evaluation. A stipulation of the most recent NOV was to submit a full and complete application for the equipment. There are no hearing board action, permit denials, legal settlements. Not a Title V facility.

2.0 PROCESS DESCRIPTION

2.1 Equipment Description

Cement Silo

Make: Cement Tech;

Model: CT-200LP;

Capacity: 800 cubic ft.;

Vented to a dust collector: Make - Bellgrade, Model - Belle 150 Style Dust House, 375 cfm, with 18 polyester sock filters rated at 99.94% control efficiency.

2.2 Process

These are two (2) cement silos operating on the same site and will be treated as one project.

Cements are delivered in 25 ton loads by truck and loaded pneumatically into the silos which are controlled by integrated baghouse. The cements are dispensed into volumetric mixing trucks through a sealed 7” auger powered by an exempt 16 hp gasoline engine. The auger has a 3’ sock attached to the end which is lowered into the filling port of the volumetric truck.

2.3 Emission Controls

Dust collector of 99.94% control efficiency.

2.4 Attachments – Supplemental application form, silo and dust collector specifications.

3.0 EMISSIONS

Emission Estimate Summary –

Table 1: Potential Emissions

PM	Single Silo			Project Emissions		
	lbs/hour	lbs/day	tons/year	lbs/hour	lbs/day	tons/year
Cement loading/dispensing	0.00744	0.01488	0.001860	0.01488	0.02976	0.003720

Table 2: Actual Expected Emissions

PM	Single Silo			Project Emissions		
	lbs/hour	lbs/day	tons/year	lbs/hour	lbs/day	tons/year
Cement loading/dispensing	0.00372	0.00744	0.000037	0.00744	0.01488	0.000074

2.3 Emission Estimate Assumptions

- Potential emissions are based on throughput of 50 tons/hour, 100 tons/day and 12,500 tons/year (single silo)
- Actual expected emissions are based on 25 tons/hour, 50 tons/day, and 250 tons/year (single silo).
- Loading and dispensing of single silo not expected to operate simultaneously but accounted for in hourly PTE.
- Loading or dispensing of both silos not expected to operate simultaneously, but accounted for in hourly PTE.

- 25 tons/day loading, 25 tons/day dispensing maximum for each silo (permit limits)
- 12,500 tons/year maximum PTE loading per silo (permit limits)
- Emissions controlled by integrated baghouse/sock at 99.94% efficiency.
- Dispensing emissions (silo to volumetric truck) are controlled by sealed auger, dispensing sock on end of auger, dropping into volumetric truck with 4" filling port.
- DEFAULT VALUES - CEMENT / FLY ASH STORAGE SILOS - Pneumatic, Uncontrolled loading factor used - 0.248 lbs PM10/ton (assume 92% PM10)
- Dispensing/unloading assumed to be similar to loading emissions.

2.4 Attachments – District emission factors and AP-42 emission factors.

4.0 APPLICABLE RULES

4.1 Prohibitory Rules

Rule 50: Visible emissions

This Rule prohibits any person from discharging from any sources of emissions for a period of more than three minutes any air contaminant which is darker in shade than that designated as Number 1 on the Ringlemann Chart, or of such opacity as to obscure an observer's view to a degree greater than does smoke of a shade designated as number 1 on the Ringlemann chart. *Equipment is controlled by integrated dust collector/baghouse, therefore, visible emissions from the silo are expected to be in compliance with this rule. Permit conditions will specify this requirement.*

Rule 51: Nuisance

This Rule prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other materials which causes injury, nuisance or annoyance to the public or which causes damage to business or property. *Equipment is controlled by integrated dust collector/baghouse, therefore, visible emissions from the silo are expected to be in compliance with this rule. Permit conditions will specify this requirement.*

Rule 52: Particulate matter

This rule prohibits any source from discharging particulate matter in excess of 0.10 grains per dry standard cubic foot of gas. *Particulate emission from the cement silo dust collector is 0.002314667 grains/dscft (see Emission Calculation), therefore it is in compliance with this requirement.*

Rule 54- Dust and Fumes

For a source with process weight at or higher than 1000 lb per hour, dust and fumes discharged into the atmosphere shall not exceed 2.8 lbs/hour. *Particulate emission from this silo is 0.0074 lbs/hour, therefore it is in compliance with this requirement.*

4.2 New Source Review.

Best Available Control Technology:

Rule 20.2(d)(1)(i) requires any new or modified unit with a post-project potential to emit of 10 lbs per day or more of particulate matter (PM10), NOx, VOC, SOx, or CO to be equipped with Best Available Control Technology (BACT) for each such air contaminant.

At 0.0298 lbs/day of PM10 emissions, this cement silo does not trigger BACT requirement.

Air Quality Impact Analysis

Rule 20.2 (d)(2)(i) requires any new or modified project which results in an emission increase equal to or greater than any of the amounts listed below to perform an Air Quality Impact Analysis. Area fugitive emissions of PM10 are not included in the demonstration.

- Particulate Matter (PM): 100 lbs/day, 15 tpy
- NOx: 25 lbs/hour, 250 lbs/day, 40 tpy
- SOx: 25 lbs/hour, 250 lbs/day, 40 tpy
- CO: 100 lbs/hour, 550 lbs/day, 100 tpy
- Lead and lead compounds: 3.2 lbs/day, 0.6 tpy

The PM10 emission from this silo do not trigger AQIA at the following emissions from cement loading/dispensing:

PM	Project Emissions		
	lbs/hour	lbs/day	tons/year
Cement loading/dispensing	0.01488	0.02976	0.003720

Prevention of Significant Deterioration (PSD)

Rule 20.2 (d)(3) states that the District shall not issue an Authority to Construct or modified Permit to Operate for any project which will have a significant impact on a Class I Area or will have after issuance of a Permit, an aggregate potential to emit one or more air contaminants in amounts equal to or greater than 250 tons/year of PM10, NOx, VOC, SOx, CO.

The PM10 emissions from this silo do not trigger PSD requirements.

Public Notice and Comment

Rule 20.2 (d)(4) requires a public notice and comment period for any applications which require an AQIA under Sections d(2) or d(3).

The proposed equipment does not trigger the Public Notice and Comments requirements.

4.3 Toxic New Source Review

This rule applies to any new, relocated, or modified emission unit which results in any increase emissions of one or more toxic air contaminant(s), and for which an Authority to Construct or Permit to Operate is required.

This project (APCD2024-APP-008106_8125) was sent for a refined HRA as it did not qualify for de-minimis. The initial HRA was run at 50 tons/hr, 100 tons/day, 250 tons/yr but was scaled to 12,500 tons/year to allow for a higher throughput of the facility if needed. Cancer risk was multiplied by 50 to scale for increased throughput (250 to 12,500 tons/yr).

The results of the HRA, after scaling, are as follows:

Cancer Risk increase (per one million)	0.50	Project meets standard of one in one million.
Chronic HHI	0.000457≤1	Meets standard of one.

Acute HHI	0.05≤1	Meets standard of one.
Passes Rule 1200?	Yes	With 50 tons/hr, 100 tons/day, 12,500 tons/year limits

Based on this analysis, the proposed equipment complies with all applicable requirements of District Rule 1200.

4.4 AB 3205 – AB3205 requires a public notice prior to issuing an Authority to Construct for equipment emitting hazardous air contaminants at a facility within 1000 feet of a school.

This project is located within 1000 feet of a school (Lakeside Farms Elementary), so public notice is required for this section. A copy of the public notice is attached to the file and when the notice is issued, this evaluation and relevant attachments will be made available on the District’s website for review. If any comments are received, they will be reviewed, considered and responded to prior to taking action on the permit including revising any requirements as necessary in response to comments received.

4.5 NESHAPS, NSPS and ATCMs –

This application is not subject to NESHAPS and ATCMs

NSPS - 40 CFR Part 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants. Section § 60.670(a)(2) of this subpart states that the requirements of this subpart do not apply to plants without crushers or grinding mills above ground.

This silo does not have any crushers or grinding mills above ground. Therefore, it is exempt from this NSPS.

5.0 RECOMMENDATION

The cement silo is expected to comply with all the applicable rules and regulations. An Authority to Construct is recommended.

6.0 RECOMMENDED CONDITIONS

Condition set BEC APCD2018-CON-001411 with 50 tons/hr, 100 tons/day, 12,500 tons/year throughput limits.

Changes are as follows:

- Add rule references to C4.
- C40305 to MOD_C40305: Add Rule 52 reference.
- C44696 to MOD_C44696: Add 25 tons per day limit, change yearly throughput limit to 12,500 tons per year.
- C44054 to MOD_C44054: Change wording to add “pneumatic loading” throughput.
- C27945 to MOD_C27945: Add rule 52 and rule 1200 reference.
- Delete C43247 (removal of haul road requirements as haul road not applicable)

Rule 1200 Health Risk Assessment

Facility Name: DDT LLC
Facility ID: APCD2020-SITE-03434
Application: APCD2024-APP-008106, -008125
Project Engineer: Austin Stein
Modeler: Tony Nguyen
Toxics Risk Analyst: Maria Galvez
Date Submitted to Toxics: 3/22/2024
Date Completed by Toxics: 4/18/2024
HRA Tools Used: Lakes-AERMOD (Version 23132)/HARP (v22118)

The following estimated risks are valid only for the input data provided by the Project Engineer.

Estimated worker risk does not exceed the residential risk. Therefore, only residential risk is presented in the following results.

Estimated Risk Levels:

Maximum Individual Cancer Risk (Resident)	0.01 in one million
Chronic Noncancer Health Hazard Index (Resident)	= 4.57E-04
8-Hour Noncancer Health Hazard Index (Worker)	= NA*
Acute Health Hazard Index (**PMI)	= 0.05

*8-Hour Non-Cancer Health Hazard Index is only applicable when calculating worker risk

**Point of Maximum Impact

Sub-Chronic Lead Exposure Risk < 0.12 ug/m³ (ARB Standard)

Since annual lead emissions at the site are less than the 0.08 lb/yr point source de minimis level (modeled with AERMOD) at a distance of 10 m, the 30-day lead concentration at the point of Maximum Offsite Concentration (MOC) can be assumed to be less than the High Exposure Scenario approval level of 0.12 ug/m³ in the ARB Risk Management Guidelines for Lead, 2001. Worst-case generic release parameters were assumed, and lead emissions were estimated based on annual emissions being emitted in 30 days.

Rule 1200 Health Risk Assessment Report

DDT LLC, 03434

Application Number 008106, 008125

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4/18/2024

Input Data Provided by Project Engineer:

Type of Source: Cement Silo

Worst-Case TAC Emissions Increase:

Each Cement Silo Vent Filter:

Toxic Air Contaminant	Hourly Emission Rate (lb/hr)	Annual Emission Rate (lb/yr)
Aluminum	1.10E-04	1.10E-03
Arsenic	1.49E-07	1.49E-06
Barium	0.00E+00	0.00E+00
Beryllium	7.44E-09	7.44E-08
Cadmium	7.44E-09	7.44E-08
Chromium (total)	3.72E-08	3.72E-07
Cobalt	0.00E+00	0.00E+00
Copper	2.08E-07	2.08E-06
Lead	8.18E-08	8.18E-07
Manganese	2.74E-06	2.74E-05
Nickel	1.71E-07	1.71E-06
Selenium	7.44E-09	7.44E-08
Silica (crystalline)	0.00E+00	0.00E+00
Zinc	6.32E-07	6.32E-06

Release Parameters:

Release Parameter	Silo Vent Filters
Exhaust Flow Rate, cfm:	0 (downward)
Exhaust Temperature, °F:	ambient
Stack Height above ground, ft:	3.0
Stack Diameter, ft:	0.5

Discussion

The HRA was conducted in accordance with EPA and OEHHA guidance and District standard procedures. Two point sources were modeled with refined air dispersion modeling using EPA's AERMOD model, AERMET (Version 22112) processed Lexington Elementary School 2019/2021 sigma theta updated meteorology data, AERMAP terrain processing, and rural dispersion coefficients. Building downwash effects were calculated using the EPA BPIP-Prime model. The receptor grid was sufficiently dense to identify maximum impacts.

These risk results are based on the risk scenario calculations and health data at the time of the review and should not be scaled with revised emissions rates without consulting with the Toxics Section.

*HARP - HRACalc v22118 4/18/2024 11:04:54 AM - Cancer Risk - Input File: D:\8106_8125_DDT LLC\8106_8125_HARP\hra\resident_HRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBRE\	RISK_SUM	SCENARIO
29548	ALL		506416.1	3636472	0.000106	7429905	Aluminum	0.00E+00	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	1.44E-07	7440382	Arsenic	7.72E-09	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	0	7440393	Barium	0.00E+00	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	7.21E-09	7440417	Beryllium	4.10E-11	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	7.21E-09	7440439	Cadmium	7.32E-11	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	3.61E-08	7440473	Chromium	0.00E+00	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	0	7440484	Cobalt	0.00E+00	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	2.02E-07	7440508	Copper	0.00E+00	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	7.93E-08	7439921	Lead	2.24E-11	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	2.66E-06	7439965	Manganese	0.00E+00	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	1.66E-07	7440020	Nickel	1.02E-10	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	7.21E-09	7782492	Selenium	0.00E+00	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	0	1175	Silica, Cryst	0.00E+00	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
29548	ALL		506416.1	3636472	6.13E-07	7440666	Zinc	0.00E+00	30YrCancerRMP_InhSoilDermMMilk_FAH16to70
								7.96E-09	

*HARP - HRACalc v22118 4/18/2024 11:04:54 AM - Chronic Risk - Input File: D:\8106_8125_DDT LLC\8106_8125_HARP\hra\resident_HRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBRE\	CNS	SCENARIO
29548	ALL		506416.1	3636472	0.000106	7429905	Aluminum	0.00E+00	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	1.44E-07	7440382	Arsenic	4.27E-04	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	0	7440393	Barium	0.00E+00	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	7.21E-09	7440417	Beryllium	0.00E+00	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	7.21E-09	7440439	Cadmium	0.00E+00	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	3.61E-08	7440473	Chromium	0.00E+00	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	0	7440484	Cobalt	0.00E+00	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	2.02E-07	7440508	Copper	0.00E+00	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	7.93E-08	7439921	Lead	0.00E+00	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	2.66E-06	7439965	Manganese	2.95E-05	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	1.66E-07	7440020	Nickel	0.00E+00	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	7.21E-09	7782492	Selenium	1.42E-08	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	0	1175	Silica, Cryst	0.00E+00	NonCancerChronicDerived_InhSoilDermMMilk
29548	ALL		506416.1	3636472	6.13E-07	7440666	Zinc	0.00E+00	NonCancerChronicDerived_InhSoilDermMMilk
								0.000457	

*HARP - HRACalc v22118 4/18/2024 11:04:54 AM - Acute Risk - Input File: D:\8106_8125_DDT LLC\8106_8125_HARP\hra\resident_HRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBRE\	IMMUN	SCENARIO
29606	ALL		506453	3636474	6.761844	7429905	Aluminum	0.00E+00	NonCancerAcute
29606	ALL		506453	3636474	0.0092	7440382	Arsenic	0.00E+00	NonCancerAcute
29606	ALL		506453	3636474	0	7440393	Barium	0.00E+00	NonCancerAcute
29606	ALL		506453	3636474	0.000459	7440417	Beryllium	0.00E+00	NonCancerAcute
29606	ALL		506453	3636474	0.000459	7440439	Cadmium	0.00E+00	NonCancerAcute
29606	ALL		506453	3636474	0.002297	7440473	Chromium	0.00E+00	NonCancerAcute
29606	ALL		506453	3636474	0	7440484	Cobalt	0.00E+00	NonCancerAcute
29606	ALL		506453	3636474	0.012842	7440508	Copper	0.00E+00	NonCancerAcute
29606	ALL		506453	3636474	0.005051	7439921	Lead	0.00E+00	NonCancerAcute
29606	ALL		506453	3636474	0.169174	7439965	Manganese	0.00E+00	NonCancerAcute
29606	ALL		506453	3636474	0.010558	7440020	Nickel	5.28E-02	NonCancerAcute
29606	ALL		506453	3636474	0.000459	7782492	Selenium	0.00E+00	NonCancerAcute
29606	ALL		506453	3636474	0	1175	Silica, Cryst	0.00E+00	NonCancerAcute
29606	ALL		506453	3636474	0.039021	7440666	Zinc	0.00E+00	NonCancerAcute
								0.05279	

PROJECT TITLE:

**APP008106_8125 Cancer Risk
MEIR 29548**

COMMENTS:

SOURCES:

2

RECEPTORS:

29620

OUTPUT TYPE:

Concentration

MAX:

1.8E-02 ug/m³

COMPANY NAME:

MODELER:

DATE:

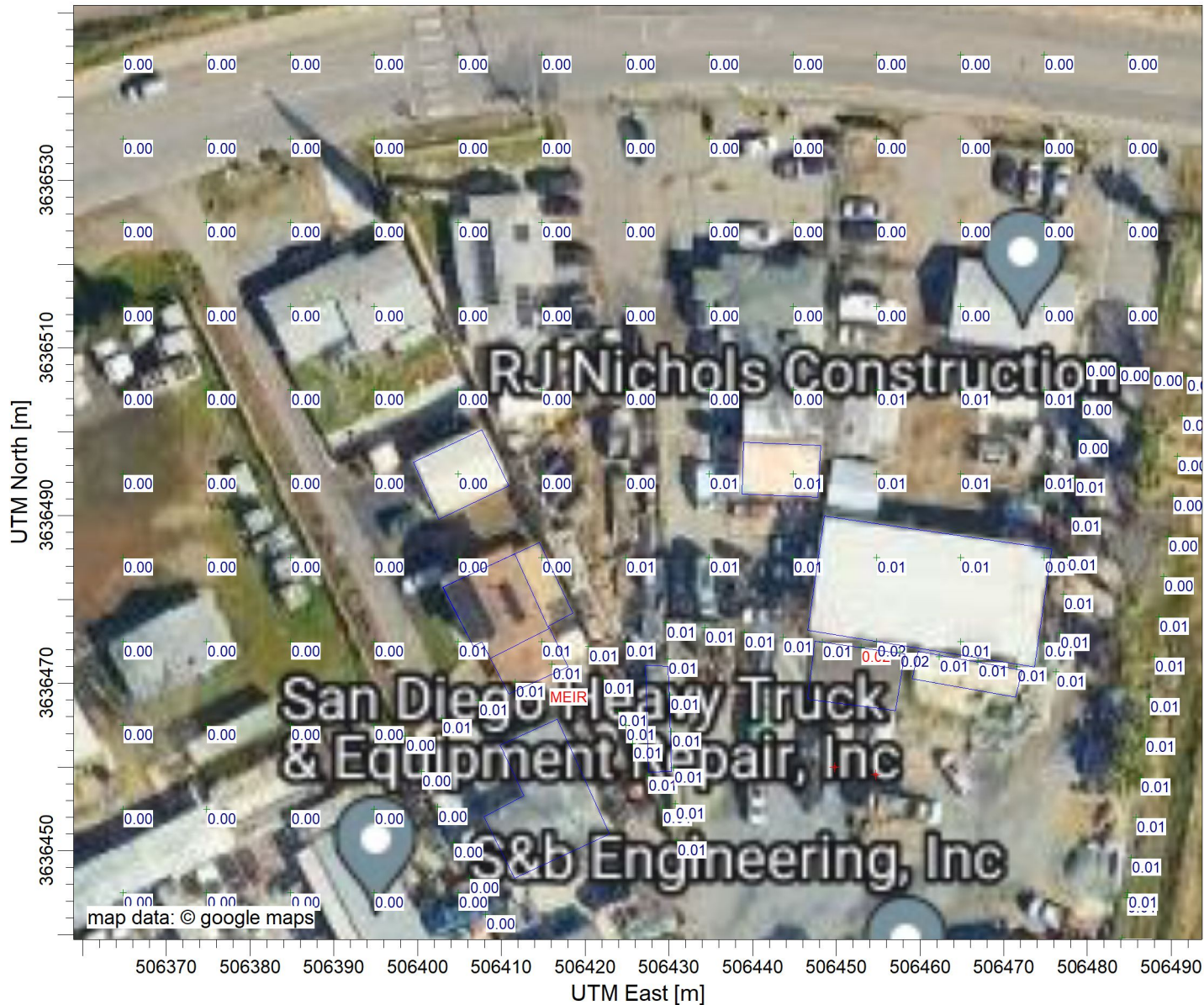
4/18/2024

SCALE:

1:759

0  0.02 km

PROJECT NO.:



PROJECT TITLE:

**APP008106_8125 Chronic HHI
MEIR 29548**

COMMENTS:

SOURCES:

2

RECEPTORS:

29620

OUTPUT TYPE:

Concentration

MAX:

1.01E-03 ug/m³

COMPANY NAME:

MODELER:

DATE:

4/18/2024

SCALE:

1:432

0  0.01 km

PROJECT NO.:



PROJECT TITLE:

**APP008106_8125 Acute HHI
PMI 29606**

COMMENTS:

SOURCES:

2

RECEPTORS:

29620

OUTPUT TYPE:

Concentration

MAX:

5.3E-02 ug/m³

COMPANY NAME:

MODELER:

DATE:

4/18/2024

SCALE:

1:824

0  0.02 km

PROJECT NO.:



Toxic Screening

Applicant: DDT LLC
Equipment: Concrete silo

Application No: APCD2024-APP-008106, 008125

1. Each cement silo vent filter:

TRACE METAL	DEFAULT VALUE (ppmw)	PERCENTAGE (%)	TSP EMISSIONS (lbs/hr)	HOURLY EMISSIONS H _a (lbs/hr)	ANNUAL EMISSIONS A _a (lbs/yr)	HOURLY EMISSIONS H _s (lbs/hr)	ANNUAL EMISSIONS A _s (lbs/yr)	Ha/Hs	As/As	
Aluminum	14720		7.44E-03	1.10E-04	1.10E-03	n/a	n/a	0.00E+00	0.00E+00	7429905
Arsenic	20		7.44E-03	1.49E-07	1.49E-06	2.30E-05	5.30E-04	3.36E-02	4.88E+00	7440382
Barium			7.44E-03	0.00E+00	0.00E+00	n/a	n/a	0.00E+00	0.00E+00	7440393
Beryllium	1		7.44E-03	7.44E-09	7.44E-08	n/a	9.10E-03	0.00E+00	1.42E-02	7440417
Cadmium	1		7.44E-03	7.44E-09	7.44E-08	n/a	5.10E-03	0.00E+00	2.54E-02	7440439
Chromium VI	5		7.44E-03	3.72E-08	3.72E-07	n/a	n/a	0.00E+00	0.00E+00	7440473
Cobalt			7.44E-03	0.00E+00	0.00E+00	n/a	n/a	0.00E+00	0.00E+00	7440484
Copper	28		7.44E-03	2.08E-07	2.08E-06	1.20E-02	7.20E+01	9.03E-05	5.03E-05	7440508
Lead	11		7.44E-03	8.18E-08	8.18E-07	n/a	1.30E-01	0.00E+00	1.09E-02	7439921
Manganese	368		7.44E-03	2.74E-06	2.74E-05	n/a	6.00E+00	0.00E+00	7.93E-03	7439965
Nickel	23		7.44E-03	1.71E-07	1.71E-06	7.30E-04	8.40E-02	1.22E-03	3.54E-02	7440020
Selenium	1		7.44E-03	7.44E-09	7.44E-08	n/a	6.00E+02	0.00E+00	2.16E-07	7782492
Silica (crystalline)			7.44E-03	0.00E+00	0.00E+00	n/a	9.00E+01	0.00E+00	0.00E+00	1175
Zinc	85		7.44E-03	6.32E-07	6.32E-06	n/a	1.10E+03	0.00E+00	1.00E-05	7440666

□ Ha / Hs = 3.49E-02
 □ Aa / As = 4.98E+00
 Annual emi: 3.72E-05 tons/year

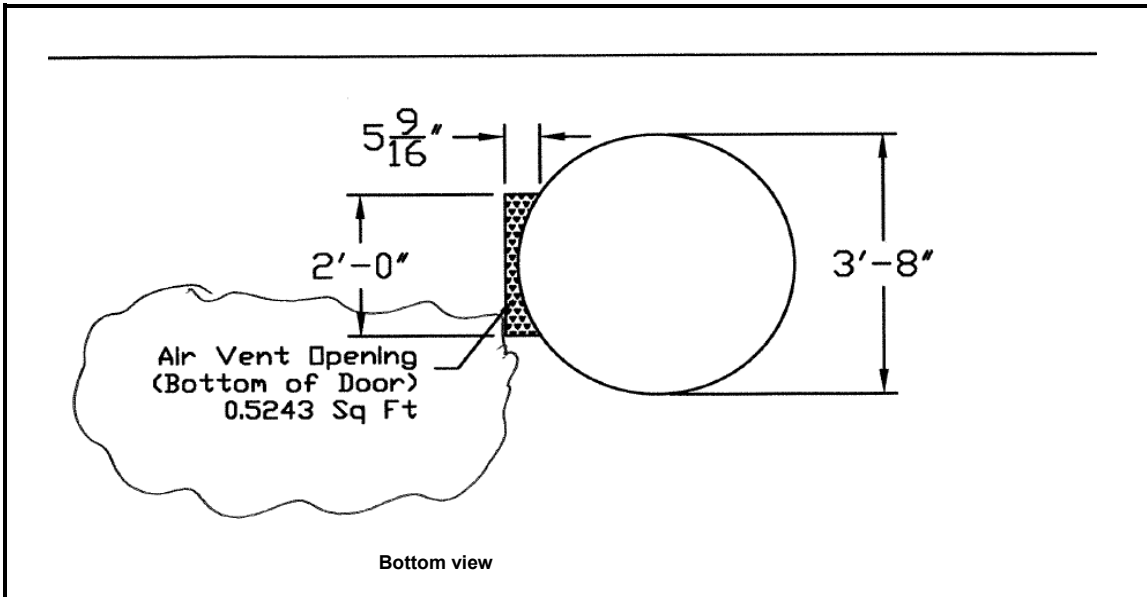
Facility Name: DDT LLC
 Application Number: APCD2024-APP-008106_8125
 Site ID Number: APCD2020-SITE-03434
 Equipment Address: 12125 Lakeside Ave, Lakeside, CA 92040
 Project Description: Two (2) identical, existing unpermitted, 25 ton capacity cement silos with integrated baghouses
 Project Engineer: Austin Stein

Exhaust Flow Rate, cfm: 375
 Exhaust Temperature, °F: Ambient
 Stack Height above ground, ft: 3.0
 Stack Diameter, ft: 0.5

Nearest School, ft: 750.00
 Residential Receptor, m: 33.83 111 ft
 Occupational Receptor, m: 25.00 28 ft
 Acute Receptor, m: 25.00 28 ft

Vertical Exhaust? (yes/no): no

Exhaust Geometry: Exhaust is a downward facing vent, partially rectangular in shape. It is the shaded area in diagram below



Side View

HARP2 - HRACalc (dated 22118) 4/18/2024 11:04:54 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 30

Exposure Duration Bin Distribution

3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 14
16 to 70 Years Bin: 0

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

Daily breathing rate: RMP

****Worker Adjustment Factors****
Worker adjustment factors enabled: NO

****Fraction at time at home****
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Warm

TIER 2 SETTINGS
Tier2 not used.

Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\8106_8125_DDT
LLC\8106_8125_HARP\hra\resident_CancerRisk.csv
Cancer risk total by receptor saved to: D:\8106_8125_DDT
LLC\8106_8125_HARP\hra\resident_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\8106_8125_DDT
LLC\8106_8125_HARP\hra\resident_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\8106_8125_DDT
LLC\8106_8125_HARP\hra\resident_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\8106_8125_DDT
LLC\8106_8125_HARP\hra\resident_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\8106_8125_DDT
LLC\8106_8125_HARP\hra\resident_NCAcuteRiskSumByRec.csv
HRA ran successfully

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*** MODELOPTs: RegDEFAULT CONC ELEV RURAL SigA Data

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
STCK1	0	0.10000E+01	506449.8	3636460.0	120.5	0.91	-0.00	0.00	0.15	YES	NO	NO	
STCK2	0	0.10000E+01	506454.7	3636459.1	120.5	0.91	-0.00	0.00	0.15	YES	NO	NO	

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*** MODELOPTs: RegDEFAULT CONC ELEV RURAL SigA Data

*** MODEL SETUP OPTIONS SUMMARY ***

** Model Options Selected:

- * Model Uses Regulatory DEFAULT Options
- * Model Is Setup For Calculation of Average CONCentration Values.
- * NO GAS DEPOSITION Data Provided.
- * NO PARTICLE DEPOSITION Data Provided.
- * Model Uses NO DRY DEPLETION. DDPLETE = F
- * Model Uses NO WET DEPLETION. WETDPLT = F
- * Stack-tip Downwash.
- * Model Accounts for ELEVated Terrain Effects.
- * Use Calms Processing Routine.
- * Use Missing Data Processing Routine.
- * No Exponential Decay.
- * Model Uses RURAL Dispersion Only.
- * TEMP_Sub - Meteorological data includes TEMP substitutions
- * Model Assumes No FLAGPOLE Receptor Heights.

* The User Specified a Pollutant Type of: OTHER

**Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages

**This Run Includes: 2 Source(s); 3 Source Group(s); and 29620 Receptor(s)

with: 2 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 0 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)
and: 0 SWPOINT source(s)

**Model Set To Continue RUNNING After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 22112

**Output Options Selected:

Model Outputs Tables of PERIOD Averages by Receptor
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE 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) = 143.00 ; 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 = 9.4 MB of RAM.

**Input Runstream File: aermod.inp

Profile format: FREE

Surface station no.: 53143

Name: UNKNOWN

Year: 2019

Upper air station no.: 3190

Name: UNKNOWN

Year: 2019

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
19	01	01	1	01	-1.2	0.036	-9.000	-9.000	-999.	17.	3.4	0.03	1.10	1.00	1.07	109.	10.0	279.8	10.0			
19	01	01	1	02	-0.4	0.018	-9.000	-9.000	-999.	6.	1.5	0.03	1.10	1.00	0.54	221.	10.0	278.4	10.0			
19	01	01	1	03	-0.4	0.020	-9.000	-9.000	-999.	7.	1.7	0.03	1.10	1.00	0.58	120.	10.0	277.3	10.0			
19	01	01	1	04	-0.9	0.029	-9.000	-9.000	-999.	12.	2.3	0.03	1.10	1.00	0.85	74.	10.0	276.5	10.0			
19	01	01	1	05	-0.6	0.024	-9.000	-9.000	-999.	9.	2.0	0.03	1.10	1.00	0.72	108.	10.0	276.0	10.0			
19	01	01	1	06	-1.1	0.032	-9.000	-9.000	-999.	14.	2.6	0.03	1.10	1.00	0.94	44.	10.0	275.4	10.0			
19	01	01	1	07	-0.7	0.024	-9.000	-9.000	-999.	9.	2.0	0.03	1.10	1.00	0.72	288.	10.0	275.5	10.0			
19	01	01	1	08	-0.5	0.024	-9.000	-9.000	-999.	9.	2.5	0.03	1.10	0.49	0.72	231.	10.0	276.0	10.0			
19	01	01	1	09	33.8	-9.000	-9.000	-9.000	154.	-999.	-99999.0	0.03	1.10	0.30	0.00	0.	10.0	279.9	10.0			
19	01	01	1	10	85.0	0.120	0.857	0.005	265.	100.	-1.8	0.03	1.10	0.23	1.16	332.	10.0	283.3	10.0			
19	01	01	1	11	119.9	0.189	1.381	0.005	785.	197.	-5.0	0.03	1.10	0.21	2.10	320.	10.0	285.3	10.0			
19	01	01	1	12	136.4	0.238	1.521	0.005	922.	278.	-8.8	0.03	1.10	0.20	2.82	18.	10.0	286.5	10.0			
19	01	01	1	13	133.6	0.307	1.572	0.005	1039.	409.	-19.4	0.03	1.10	0.20	3.93	12.	10.0	286.8	10.0			
19	01	01	1	14	112.1	0.313	1.524	0.005	1127.	419.	-24.3	0.03	1.10	0.21	4.07	26.	10.0	286.8	10.0			
19	01	01	1	15	72.7	0.324	1.339	0.005	1180.	443.	-41.9	0.03	1.10	0.24	4.38	62.	10.0	286.8	10.0			
19	01	01	1	16	18.5	0.316	0.851	0.005	1191.	426.	-152.4	0.03	1.10	0.33	4.51	44.	10.0	285.8	10.0			
19	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.03	1.10	0.61	4.02	71.	10.0	284.5	10.0			
19	01	01	1	18	-21.6	0.194	-9.000	-9.000	-999.	205.	30.1	0.03	1.10	1.00	3.67	76.	10.0	283.2	10.0			
19	01	01	1	19	-8.3	0.088	-9.000	-9.000	-999.	69.	7.2	0.03	1.10	1.00	2.59	53.	10.0	282.6	10.0			
19	01	01	1	20	-4.6	0.065	-9.000	-9.000	-999.	40.	5.3	0.03	1.10	1.00	1.92	93.	10.0	280.8	10.0			
19	01	01	1	21	-2.7	0.050	-9.000	-9.000	-999.	27.	4.1	0.03	1.10	1.00	1.48	85.	10.0	278.6	10.0			
19	01	01	1	22	-1.2	0.033	-9.000	-9.000	-999.	14.	2.7	0.03	1.10	1.00	0.98	82.	10.0	277.5	10.0			
19	01	01	1	23	-4.0	0.061	-9.000	-9.000	-999.	36.	4.9	0.03	1.10	1.00	1.79	85.	10.0	276.5	10.0			
19	01	01	1	24	-5.3	0.070	-9.000	-9.000	-999.	44.	5.7	0.03	1.10	1.00	2.06	100.	10.0	276.4	10.0			

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
19	01	01	01	10.0	1	109.	1.07	279.9	38.0	-99.00	0.58

F indicates top of profile (=1) or below (=0)

*** MODELOPTs: RegDEFAULT CONC ELEV RURAL SigA Data

*** THE SUMMARY OF MAXIMUM PERIOD (26304 HRS) RESULTS ***

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

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
STCK1	1ST HIGHEST VALUE IS	7892.50845 AT (506452.95, 3636474.32, 120.58, 243.62, 0.00)	DC	
	2ND HIGHEST VALUE IS	7577.26674 AT (506454.83, 3636474.99, 120.55, 243.62, 0.00)	DC	
	3RD HIGHEST VALUE IS	6653.85445 AT (506430.33, 3636464.25, 120.32, 243.62, 0.00)	DC	
	4TH HIGHEST VALUE IS	6552.17817 AT (506448.30, 3636474.90, 120.66, 243.62, 0.00)	DC	
	5TH HIGHEST VALUE IS	6505.46030 AT (506457.60, 3636473.73, 120.49, 243.62, 0.00)	DC	
	6TH HIGHEST VALUE IS	6425.89600 AT (506438.99, 3636476.07, 120.64, 243.62, 0.00)	DC	
	7TH HIGHEST VALUE IS	6285.09651 AT (506443.64, 3636475.49, 120.68, 243.62, 0.00)	DC	
	8TH HIGHEST VALUE IS	6104.82404 AT (506430.55, 3636459.92, 120.30, 243.62, 0.00)	DC	
	9TH HIGHEST VALUE IS	5885.14349 AT (506430.11, 3636468.58, 120.36, 243.62, 0.00)	DC	
	10TH HIGHEST VALUE IS	5819.61489 AT (506430.76, 3636455.59, 120.31, 243.62, 0.00)	DC	
STCK2	1ST HIGHEST VALUE IS	7116.87371 AT (506454.83, 3636474.99, 120.55, 243.62, 0.00)	DC	
	2ND HIGHEST VALUE IS	7068.14212 AT (506457.60, 3636473.73, 120.49, 243.62, 0.00)	DC	
	3RD HIGHEST VALUE IS	6981.27953 AT (506452.95, 3636474.32, 120.58, 243.62, 0.00)	DC	
	4TH HIGHEST VALUE IS	5986.84704 AT (506448.30, 3636474.90, 120.66, 243.62, 0.00)	DC	
	5TH HIGHEST VALUE IS	5879.71636 AT (506462.26, 3636473.15, 120.42, 243.62, 0.00)	DC	
	6TH HIGHEST VALUE IS	5632.87612 AT (506443.64, 3636475.49, 120.68, 243.62, 0.00)	DC	
	7TH HIGHEST VALUE IS	5498.12259 AT (506438.99, 3636476.07, 120.64, 243.62, 0.00)	DC	
	8TH HIGHEST VALUE IS	5356.48337 AT (506430.33, 3636464.25, 120.32, 243.62, 0.00)	DC	
	9TH HIGHEST VALUE IS	5041.49195 AT (506430.11, 3636468.58, 120.36, 243.62, 0.00)	DC	
	10TH HIGHEST VALUE IS	4933.48927 AT (506430.55, 3636459.92, 120.30, 243.62, 0.00)	DC	
ALL	1ST HIGHEST VALUE IS	14873.78798 AT (506452.95, 3636474.32, 120.58, 243.62, 0.00)	DC	
	2ND HIGHEST VALUE IS	14694.14046 AT (506454.83, 3636474.99, 120.55, 243.62, 0.00)	DC	
	3RD HIGHEST VALUE IS	13573.60242 AT (506457.60, 3636473.73, 120.49, 243.62, 0.00)	DC	

4TH HIGHEST VALUE IS 12539.02521 AT (506448.30, 3636474.90, 120.66, 243.62, 0.00) DC
 5TH HIGHEST VALUE IS 12010.33782 AT (506430.33, 3636464.25, 120.32, 243.62, 0.00) DC
 6TH HIGHEST VALUE IS 11924.01859 AT (506438.99, 3636476.07, 120.64, 243.62, 0.00) DC
 7TH HIGHEST VALUE IS 11917.97262 AT (506443.64, 3636475.49, 120.68, 243.62, 0.00) DC
 8TH HIGHEST VALUE IS 11038.31331 AT (506430.55, 3636459.92, 120.30, 243.62, 0.00) DC
 9TH HIGHEST VALUE IS 10926.63543 AT (506430.11, 3636468.58, 120.36, 243.62, 0.00) DC
 10TH HIGHEST VALUE IS 10624.90023 AT (506462.26, 3636473.15, 120.42, 243.62, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL SigA Data

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

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

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
STCK1 HIGH	1ST HIGH VALUE IS 265746.83363	ON 20042421:	AT (506438.99, 3636476.07, 120.64, 243.62,	0.00)	DC
STCK2 HIGH	1ST HIGH VALUE IS 255739.46351	ON 20071102:	AT (506454.83, 3636474.99, 120.55, 243.62,	0.00)	DC
ALL HIGH	1ST HIGH VALUE IS 404238.61019	ON 20073101:	AT (506485.26, 3636449.21, 120.60, 243.62,	0.00)	DC

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

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*** AERMET - VERSION 22112 ***

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*** MODELOPTs: RegDEFAULT CONC ELEV RURAL SigA Data

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*** Message Summary : AERMOD Model Execution ***

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

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 5244 Informational Message(s)

A Total of 26304 Hours Were Processed

A Total of 4177 Calm Hours Identified

A Total of 1067 Missing Hours Identified (4.06 Percent)

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

***** WARNING MESSAGES *****
MX W403 138 PFLCNV: Turbulence data is being used w/o ADJ_U* option SigA Data

Untitled Map
Write a description for your map.

Legend
12125 Lakeside Ave



Google Earth

100 ft

Galvez, Maria

From: Stein, Austin C
Sent: Friday, March 22, 2024 1:39 PM
To: Reeve, Bill; Nguyen, Tony
Cc: Swaney, Jim; Canter, Adam; Horres, Nicholas
Subject: APCD2024-APP-008106_8125_DDT LLC - HRA Request

Hello,

Here is an HRA request.

Please have the modeler post the results in [☐ 8106 8125 DDT LLC](#)

Thank you so much,



San Diego County
**Air Pollution
Control District**

% · fl#v# #Q#nv# #in¼iv- 2#
?f# #v#ME }}· #E ;# E ; #E }# ;tv#n#f#
Qa ;# vnt # # E · ; # #v#ME }}· #E ;# E ; #E }# v#f#ij#
'~", #E }l # #E "n#p1 #Qa ;# vnt # # # # " ' ' #
☎ # # " -D, E " D - , " ~ #
✉ # · fl#v# #Q#nv# Ófla < j l . E f t #