

Internal Use Only	
APP ID: APCD20	-APP-
SITE ID: APCD20	-SITE-

**GENERAL PERMIT OR
REGISTRATION
APPLICATION FORM**

121 AUG 04 PM 1:06 APCD



Submittal of this application does not grant permission to construct or to operate equipment except as specified in Rule 24(c) or (d)

REASON FOR SUBMITTAL OF APPLICATION:

- | | | |
|--|--|--|
| ☐ New Installation | ☐ Existing Unpermitted Equipment or Rule 11 Change | ☐ Modification of Existing Permitted Equipment |
| ☐ Amendment to Existing Authority to Construct or Application | ☐ Change of Equipment Location | ☐ Change of Equipment Ownership (please provide proof of ownership) |
| ☐ Change of Permit Conditions | ☐ Change Permit to Operate Status to Inactive | ☐ Banking Emissions |
| ☐ Registration of Portable Equipment | ☒ Other (Specify) <u>Rule 1210 Risk Reduction Plan</u> | |

List affected APP/PTO Record ID(s): Not applicable

APPLICANT INFORMATION

Name of Business (DBA): Continental Maritime of San Diego, LLC

Does this organization own or operate any other APCD permitted equipment at this or any other adjacent locations? ☒ Yes ☐ No

If yes, list assigned Site Record IDs listed on your Permits: _____

Name of Legal Owner (if different from DBA): _____

Equipment Owner

Authority to Construct Mailing Address

Name: Continental Maritime of San Diego, LLC		Name: Same	
Mailing Address: 1995 Bayfront Street		Mailing Address:	
City: San Diego	State: CA	City:	State:
Zip: 92113	Phone: (619) 234-8851 ext 510	Zip:	Phone: ()
E-Mail Address: april.mcginley@cmsd-msr.com		E-Mail Address:	

Permit To Operate Mailing Address

Invoice Mailing Address

Name: Same		Name: Same	
Mailing Address:		Mailing Address:	
City:	State:	City:	State:
Zip:	Phone: ()	Zip:	Phone: ()
E-Mail Address:		E-Mail Address:	

EQUIPMENT/PROCESS INFORMATION: Type of Equipment: ☐ Stationary ☐ Portable *If portable, please enter below the equipment storage address.* If portable, will operation exceed 12 consecutive months at the same location ☐ Yes ☐ No

Equipment Location Address: 1995 Bayfront Street City: San Diego State: CA

Parcel No.: _____ Zip: 92113 Phone: (619) 234-8851 ext 510 E-mail: april.mcginley@cmsd-msr.com

Site Contact: April McGinley, Environmental Health & Safety Supervisor Phone: (619) 234-8851 ext 510

General Description of Equipment/Process: General Application for Rule 1210 Risk Reduction Plan

Application Submitted by: ☒ Owner ☐ Operator ☐ Contractor ☐ Consultant Affiliation _____

EXPEDITED APPLICATION PROCESSING: ☐ I hereby request Expedited Application Processing and understand that:

a) Expedited processing will incur additional fees and permits will not be issued until the additional fees are paid in full (see Rule 40(d)(8)(iv) for details) b) Expedited processing is contingent on the availability of qualified staff c) Once engineering review has begun this request cannot be cancelled d) Expedited processing does not guarantee action by any specific date nor does it guarantee permit approval.

I hereby certify that all information provided on this application is true and correct.

SIGNATURE: _____

Date: 8/4/2021

Print Name: April McGinley, Environmental Health & Safety Supervisor

Phone: (619) 234-8851 ext 510

Company: Continental Maritime of San Diego, LLC

E-mail Address: april.mcginley@cmsd-msr.com

Internal Use Only

Date: _____	Staff Initials: _____	Amt Rec'd: \$ _____	Fee Schedule: _____
RNP: _____	EMF: _____	NBF: _____	TA: _____

GEN_APP_Form_Rev Date: Feb. 2015

10124 Old Grove Rd. - San Diego - California 92131-1649 - (858) 586-2600

www.sdapcd.org

Date:	4 August 2021
To:	Jim Swaney, P.E., Senior Air Pollution Control Engineer AB2588 Hot Spots Program and Health Risk Assessments San Diego Air Pollution Control District
From:	April McGinley and Trevor Jones, Continental Maritime San Diego
Subject:	Continental Maritime of San Diego Risk Reduction Plan based on the 2014 Health Risk Assessment

1.0 INTRODUCTION

Continental Maritime of San Diego (CMSD) received a letter from the San Diego Air Pollution Control District (SDAPCD or District) on 04 February 2021 notifying CMSD that the District had updated the revised Health Risk Assessment (HRA), submitted on November 25, 2020, with the approved 2014 emissions. Based on the updated HRA results, the District determined that potential public health risks exceed the public notification and risk reduction levels specified in Rule 1210 Sections (d)(1) and (e)(1). The District required a public notification plan to be submitted within 45 days of the date of the letter and a risk reduction audit and plan to be submitted within 6 months of the date of the letter that specifies the procedures CMSD intends to use to reduce risk based on the results of the HRA. A Public Notification Plan was previously submitted. This document presents the Risk Reduction Plan (RRP) for the acute noncancer health risk. The RRP is due on August 4, 2021.

2.0 ESTIMATED NONCANCER ACUTE RISK

Rule 1210 requires that a stationary source submit a risk reduction audit and plan if their most recent approved public health risk assessment indicates potential public health risks equal to or greater than one or more of the following significant risk mitigation levels:

- Maximum incremental cancer risks equal to or greater than 100 in one million, or
- Cancer burden equal to or greater than 1.0, or
- Total acute noncancer health hazard index equal to or greater than 1.0, or
- Total chronic noncancer health hazard index equal to or greater than 1.0.

Rule 1210 allows the Air Pollution Control Officer, after consultation with the state Office of Environmental Health Hazard Assessment, to waive the risk reduction audit and plan requirement for total acute or chronic noncancer health hazard index (HHI) equal to or greater than 1.0 but less than 5.0 if, that adverse public health effects are unlikely to occur at the levels of exposure estimated in the approved public health risk assessment. The 2014 final approved HRA identified acute noncancer HHI of 1.85 and 1.07, impacting Crosby Park and CP Kelco, respectively. The location of the Crosby Park receptor point is near the southern corner of the grassy field, with a 1.36 isopleth running approximately in the middle of the grass field. The CP Kelco receptor point is based on a fence line receptor located between the two facilities. Figures 1 and 2 illustrate the locations.

Figure 1. Acute Hazard Index - Crosby Park

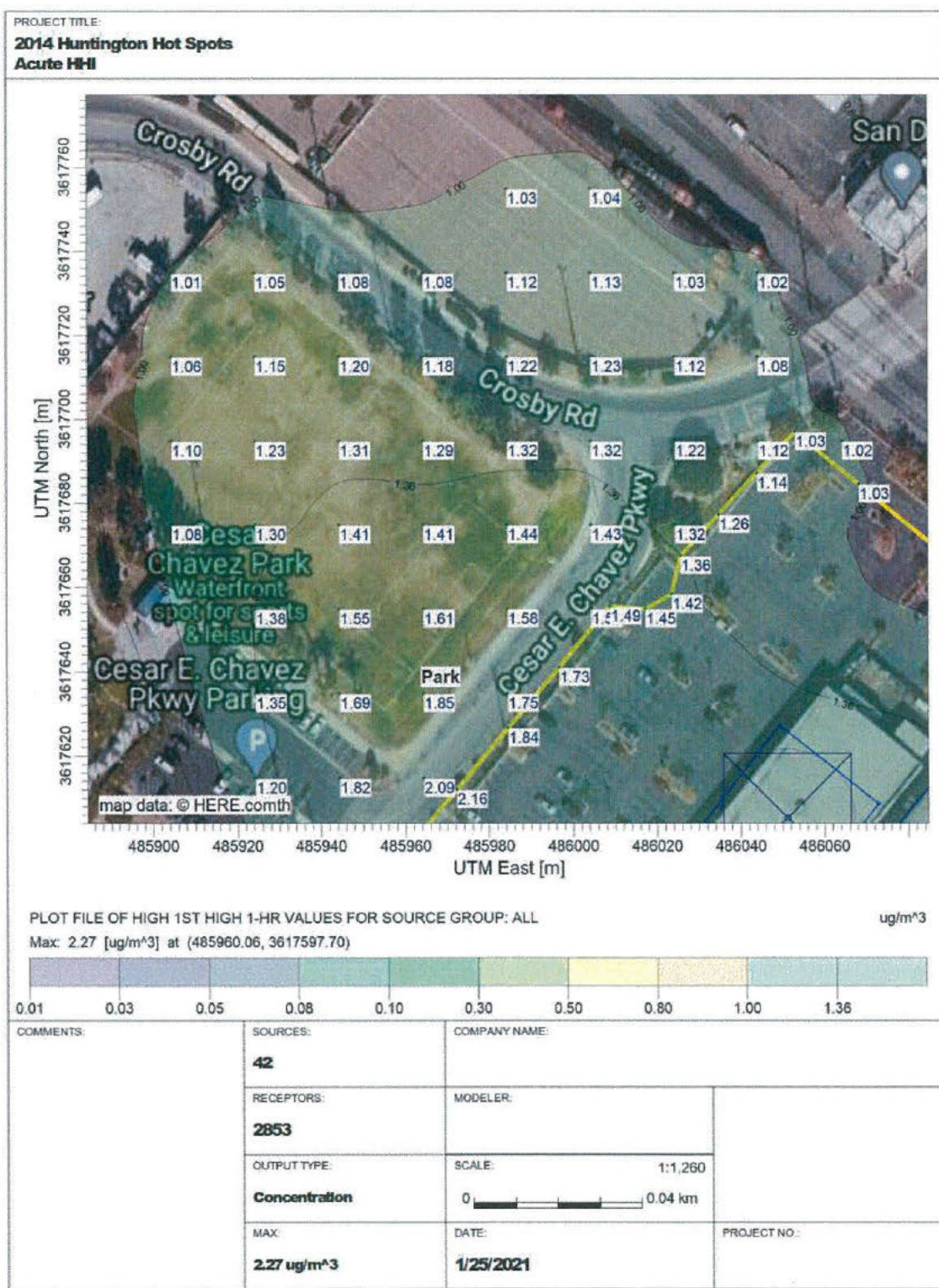
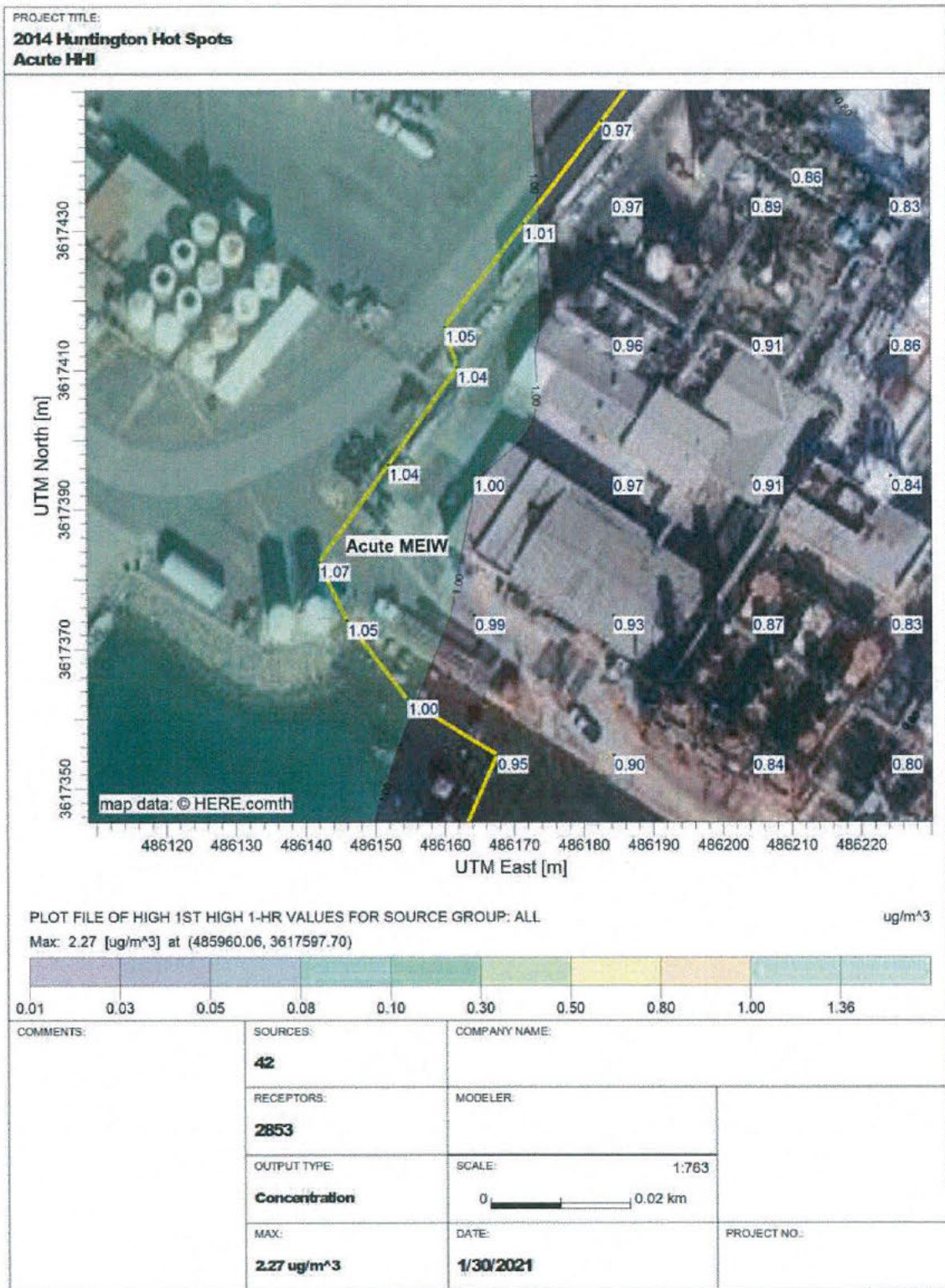


Figure 2. Acute Hazard Index – CP Kelco



3.0 RISK REDUCTION PLAN ELEMENTS

The following sections present the required elements of the RRP, as prescribed in the SDAPCD Rule 1210. Responses are provided in blue font.

Rule 1210 (e)(5) states: “The risk reduction audit and plan submitted by the owner or operator shall contain all of the following:”

- i. The name, location and standard industrial classification (SIC) code of the stationary source.

Continental Maritime of San Diego, 1995 Bay Front Street, San Diego, CA 92113, SIC 3731

- ii. The identification of the emission units and toxic air contaminants emitted by each emission unit that contribute to potential public health risks above the significant risk mitigation levels specified in Subsection (e)(1). Emission units shall be listed by decreasing contribution to the total potential public health risks estimated for the stationary source. Toxic air contaminants shall be listed for each emission unit by decreasing contribution to the potential public health risk estimated for that unit.

The plan need not include identification of emission units which emit toxic air contaminants in amounts which the approved public health risk assessment indicates do not cause maximum incremental cancer risks greater than 1.0 in a million, nor a total acute noncancer health hazard index of 1.0 or greater, nor a total chronic non-cancer health hazard index of 1.0 or greater. The plan shall include identification of all emission units for which the owner or operator proposes to reduce toxic air contaminant emissions as part of the risk reduction audit and plan.

The focus of this RRP is on the blast pit operated by CMSD. In 2014, the estimated emissions from the blast pit accounted for 78% of the acute noncancer HHI at Crosby Park and 43% of the acute noncancer HHI at the maximum occupational location, which is located along the fence line between CMSD and CP Kelco. As shown in Table 1, Nickel was the primary chemical, contributing 98% to the acute noncancer HHI at Crosby Park and 97% at CP Kelco. There are no other sources or chemicals that contribute to the acute noncancer HHI, which cause the estimated value to exceed the significant risk mitigation level of 1.0.

Table 1. 2014 Noncancer Acute HHI Levels

Receptor	Noncancer Acute HHI	Primary Source	Primary Chemical
Crosby Street Park	1.85	Abrasive Blast Pit (78%)	Nickel (98%)
CP Kelco – Worker	1.07	Abrasive Blast Pit (43%)	Nickel (97%)

The abrasive blast pit is an area outside the permanent structures at CMSD where ship anchors and other parts are blasted. These parts either cannot be blasted in the permitted abrasive blast room (APCD2006-PTO-870426) due to size or require a blast media other than steel shot. The blast pit operates infrequently. In 2014, it operated only twice between the hours of 10:00 PM and 5:00 AM.

The emission in 2014 were based on SDAPCD default emission factors for copper slag and garnet, which list nickel as 0.0480 and 0.0384 pounds per ton of blast material, respectively. In the 2014 approved inventory, a control efficiency of 75% was applied to the operation. However, the blast pit operates in a temporary, fully sealed, and enclosed area operating under negative pressure. This enclosure is connected to the same Napco Bi-radial Flow Cartridge dust collector system associated with APCD2006-PTO-870426. Due to the suction from the dust collector, the blast pit area operates under a negative pressure eliminating any blasting material from escaping. The intake filters are used to allow fresh air to enter the system, which is ultimately captured into the dust collection system and then exhausted. The system as currently setup up, has a 98% capture efficiency and 90% control efficiency.

Figures 3 through 7 illustrate the blast pit area when setup and connected to the dust collector system.

Figure 3. Front Facing Side of Outdoor Blast Pit

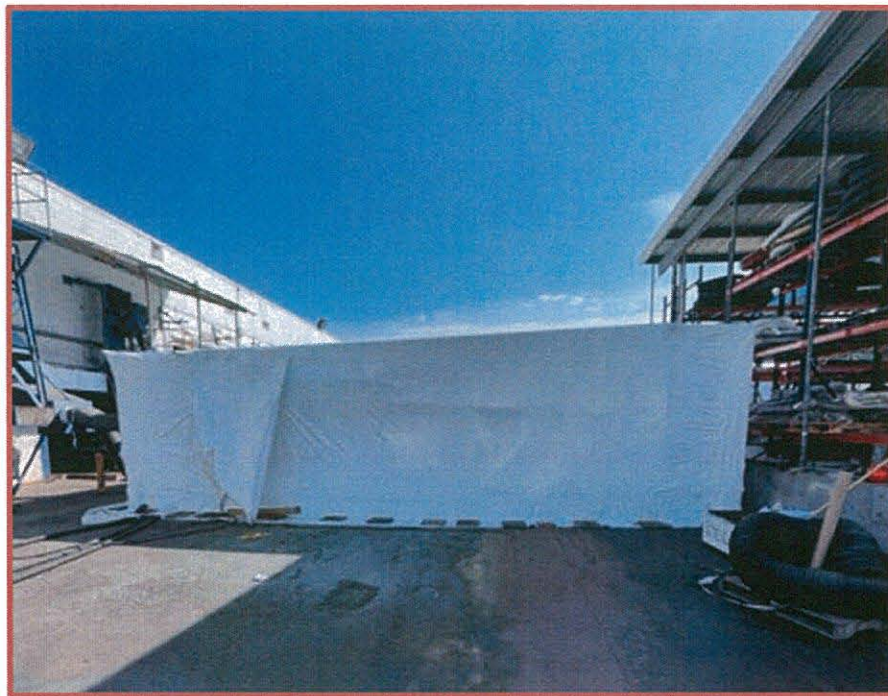


Figure 4. Back Side of Outdoor Blast Pit

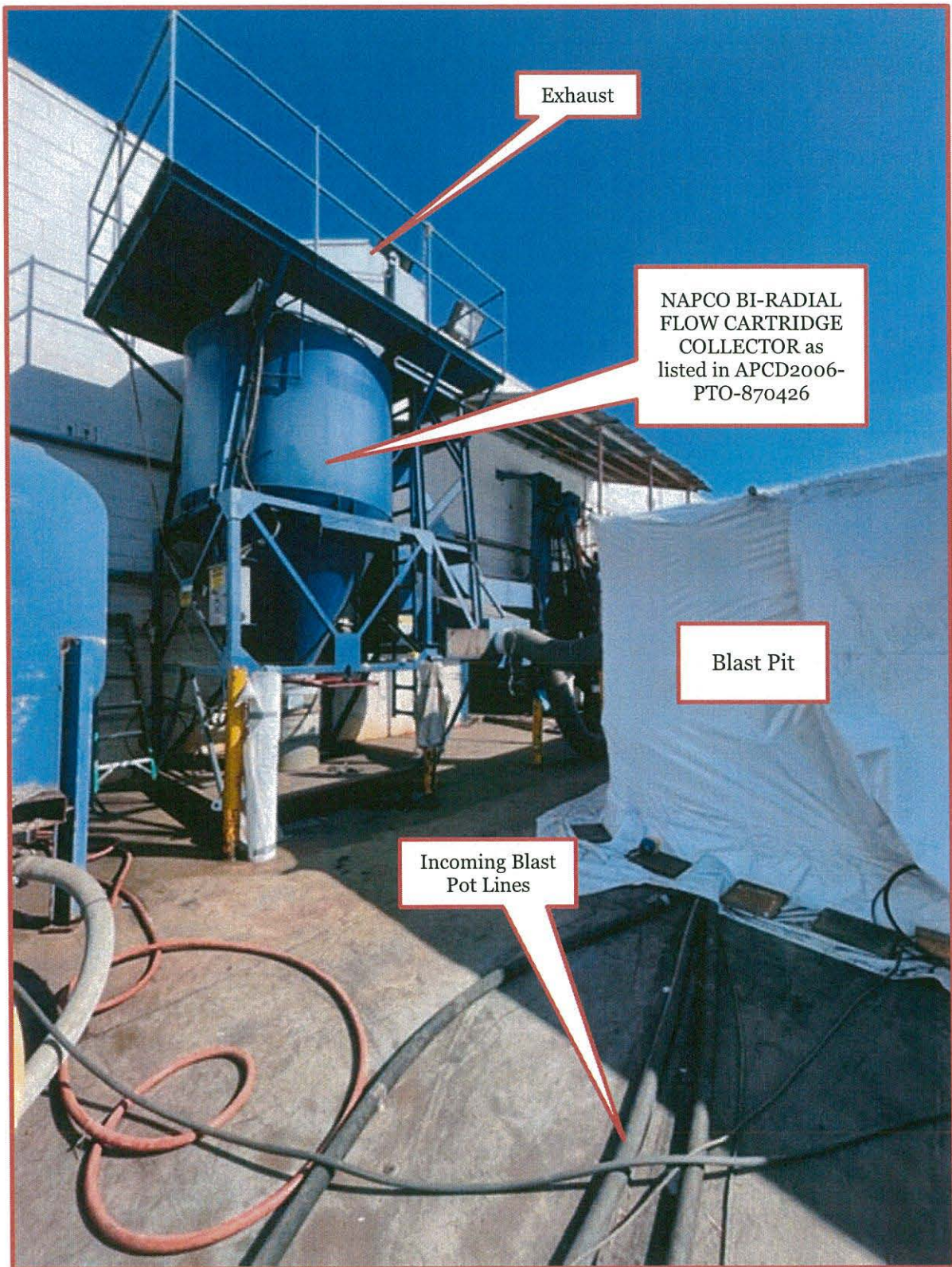


Figure 5. Connected Blast Pot (APCD2004-PTO-978761)

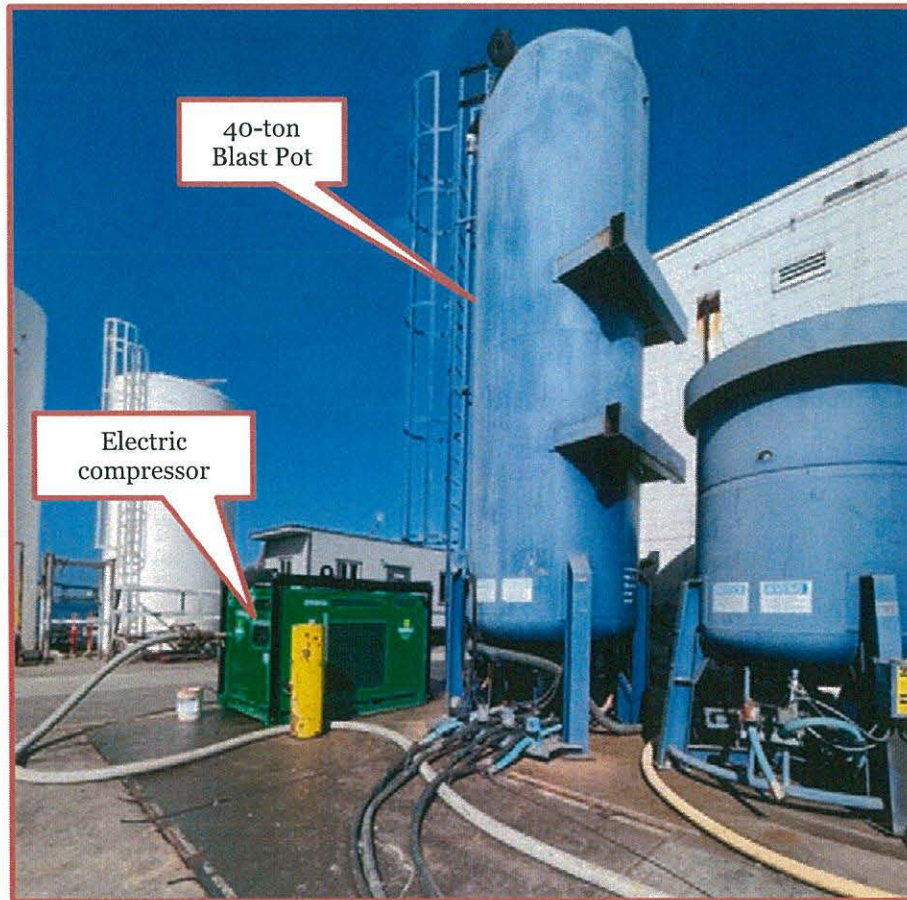


Figure 6. Side of Blast Pit connected to Dust Collector

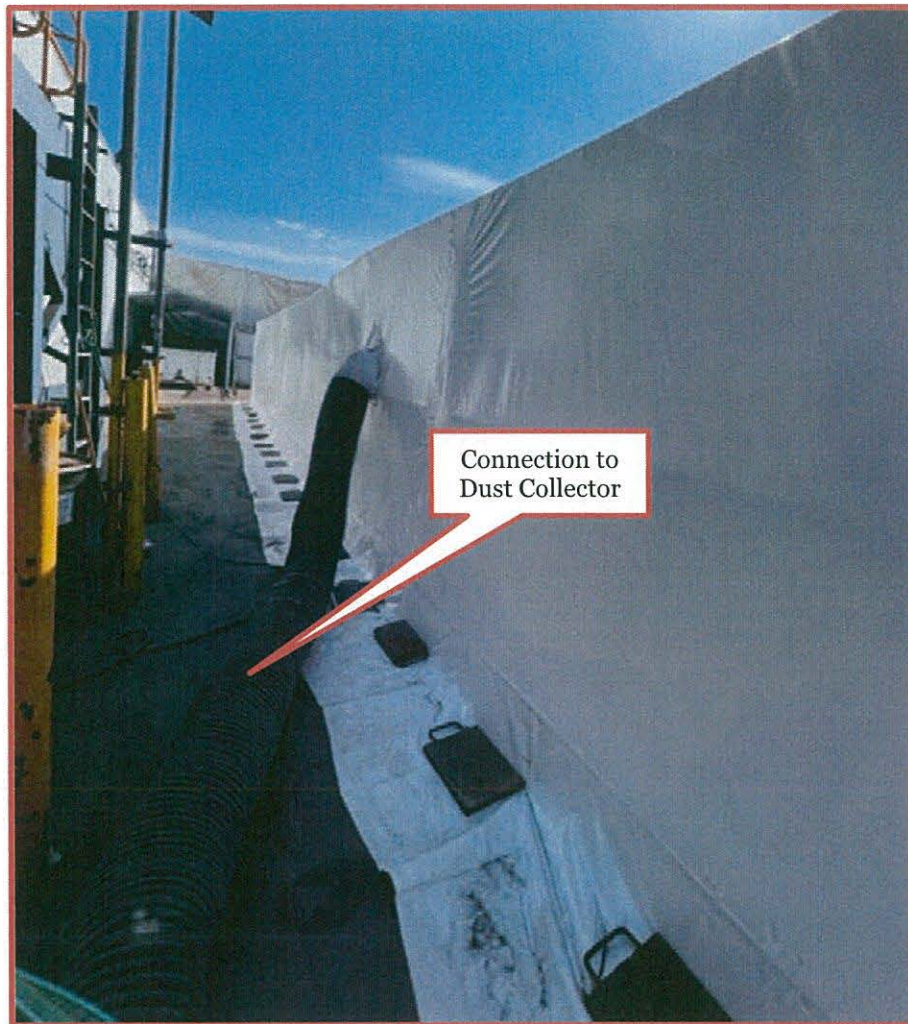
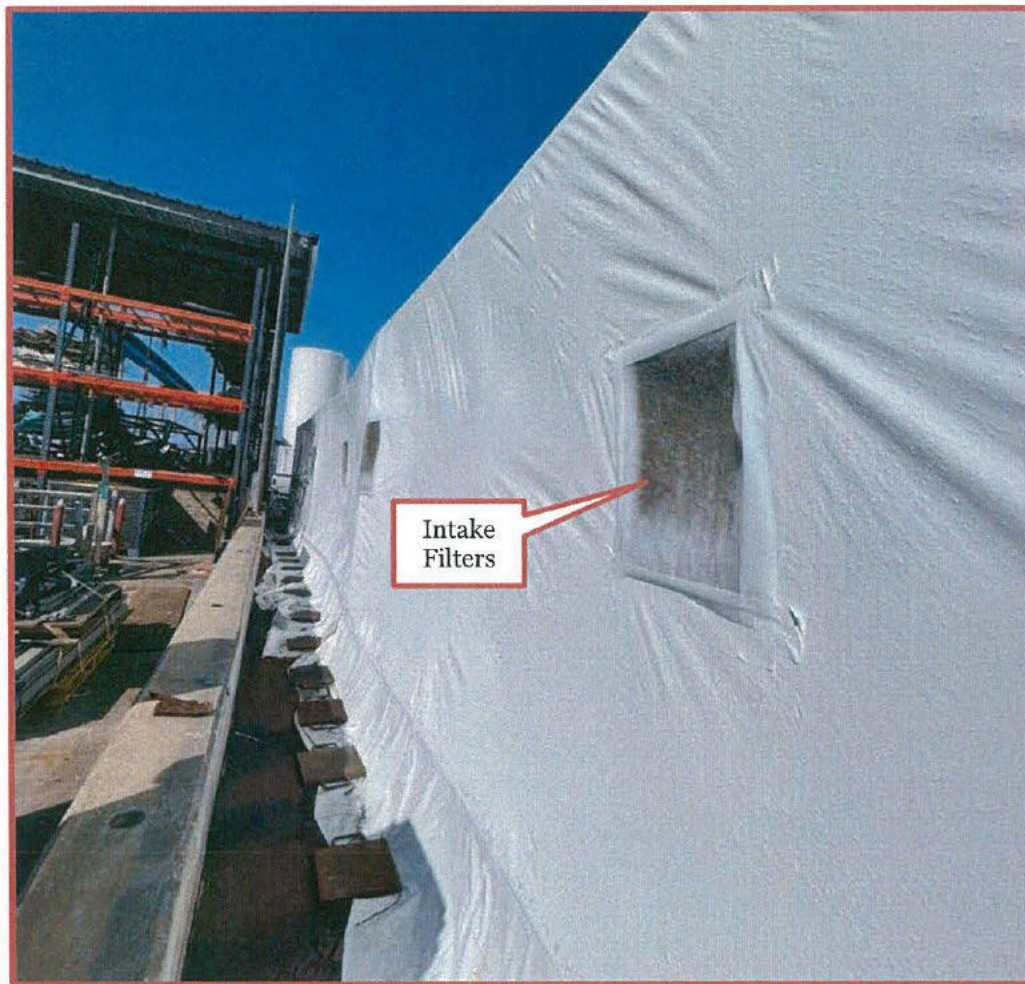


Figure 7. Side of Blast Pit with Intake Filters



- iii. A listing and an evaluation of all airborne toxic risk reduction measures available to the owner or operator and which could be used to reduce emissions from the emission units identified in Subsection (e)(5)(ii). The evaluation shall identify the emission units and toxic air contaminants affected by each measure and the extent of emission reductions that would be achieved for each emission unit and each affected contaminant.

CMSD operates the abrasive blast pit area in a fully enclosed area under negative pressure while connected to the permitted dust collection system. In the 2014 TEI, the control efficiency was incorrectly reported as 75 percent, which in turn, resulted in higher emissions and greater contribution to the estimated risk. The specifications for the dust collection system currently in place are 98% capture efficiency and 90% control efficiency, as reported in the 2014 TEI. This correction would account for a reduction in nickel from this source by 53 percent. In addition, the 2014 TEIR assumed that both copper slag and garnet blasting operations occurred at the same time. The blast pit can only operate with one abrasive blast material at a time; therefore, the 2014 TEIR overestimated the hourly emissions. This correction would reduce nickel emissions by 44 percent and bring the acute risk well below the applicable risk reduction threshold.

Table 2 summarizes the correct uncontrolled maximum hourly emissions from the blast pit based on the use of only one blasting material when compared to the 2014 TEI total of 8.64E-03 pounds per hour.

Table 2. Maximum Hourly Nickel Emissions - Corrected

Material	Hourly usage (ton/hour)	Nickel emission factor (pound/ton)	Nickel hourly uncontrolled emissions (pound/hour)
Copper Slag	0.1	4.80E-02	4.80E-03

- iv. The identification of and the rationale for the airborne toxic risk reduction measures proposed for implementation by the owner or operator. The plan shall also include the rationale for not proposing for implementation any of the airborne toxic risk reduction measures identified as available to the owner or operator, including those identified as infeasible or not economically reasonable.

The proposed toxic risk reduction measure is not a new measure to be implemented, rather a verification that the current blast pit operations have lower estimated emissions than those used in the 2014 HRA and would therefore result in acute noncancer HHI values below the significant thresholds.

- v. A schedule for implementing the proposed airborne toxic risk reduction measures within five years or within a shorter or longer period as determined by the Air Pollution Control Officer pursuant to Subsections (e)(3) or (e)(4) of this rule. The schedule shall include specific increments of progress towards implementing the airborne toxic risk reduction measures. The schedule shall include dates by which applications for any authorities to construct or modified permits to operate will be submitted to the Air Pollution Control Officer, by which each measure will be in place, and by which the actual in-use effectiveness of each measure will be demonstrated to the Air Pollution Control Officer.

The measure of setting up the blast pit area under negative pressure and connecting to the permitted dust collector is a normal operating process at CMSD.

- vi. A demonstration that the proposed airborne toxic risk reduction measures will be sufficient to reduce or eliminate toxic air contaminant emissions from the stationary source to levels sufficient to ensure that potential public health risks from such emissions are below the significant risk mitigation levels specified in Subsection (e)(1) of this rule. The demonstration shall be made through analogy with the approved public health risk assessment for the stationary source or by submission of a revised forecast risk assessment. The demonstration shall include any foreseeable new or increased emissions of toxic air contaminants from the stationary source and the estimated public health risks resulting from such new or increased emissions during the period approved for implementation of the risk reduction audit and plan.

Table 3 summarizes the difference in emissions based on the actual operating parameters of the blast pit and the effect those reductions have on the noncancer acute HHI.

Table 3. Adjusted Noncancer Acute HHI

Location (Modeling Receptor)	Total Noncancer Acute HHI	Blast Pit portion of Acute HHI	2014 TEIR controlled nickel MHE (lb/hr)	Uncontrolled nickel MHE using copper slag (lb/hr)	Capture Efficiency	Control Efficiency	Controlled nickel MHE using copper slag (lb/hr)	Emission ratio of Blast Pit HHI	Adjusted total HHI
MEIW - CP Kelco (2778)	1.07	0.45	2.16E-03	4.80E-03	98%	90%	5.66E-04	1.19E-01	0.73
Crosby Park (83)	1.85	1.44	2.16E-03	4.80E-03	98%	90%	5.66E-04	3.78E-01	0.79

By applying the correct capture and control efficiency and taking into account that only one abrasive blasting material can be used at a time at the blast pit, the adjusted noncancer acute HHI at Crosby Park and the maximum occupational location (CP Kelco) would be below the significant threshold of 1.0.

- vii. A schedule for providing progress reports on reductions in emissions of toxic air contaminants and estimated public health risks achieved under the implemented plan. Progress reports shall be provided not less frequently than annually and may be incorporated into toxic air contaminant emission inventory report updates required pursuant to Section 44344 of the Health and Safety Code.

Measure is already in place.

- viii. A certification by an engineer registered as a professional engineer pursuant to Section 6762 of the Business and Professions Code, by an individual responsible for processes or operations of the affected stationary source, or by an environmental assessor registered pursuant to Section 25570.3 of the Health and Safety Code, that the audit and plan submitted meets the requirements of Section (e) of this rule and Part 6, Chapter 6 of Division 26 of the Health and Safety Code.

I certify that the above risk reduction plan elements are true, correct, and will result in risk reductions to levels that are less than the significant mitigation levels in Rule 1210(e)(1).



Jorge Rodriguez, P.E.
Professional Engineer, California, #M35567
M.S. Hatch Consulting