

MARE ISLAND NAVAL SHIPYARD  
YARD ROUTE SLIP

Ser 460/20

21

CODE 460	STOP 032	NAME W. J. CORNILS	EXTENSION 3375/2421	DATE 4 February 1988
<input type="checkbox"/> ACTION <input type="checkbox"/> COORDINATE <input type="checkbox"/> PREPARE DRAFT <input type="checkbox"/> RETENTION <input type="checkbox"/> AS DISCUSSED <input type="checkbox"/> FILE <input type="checkbox"/> PREPARE FOR SIGNATURE <input type="checkbox"/> RETURN <input type="checkbox"/> COMMENT/CONCUR <input checked="" type="checkbox"/> INFORMATION <input type="checkbox"/> REPORT BACK <input type="checkbox"/>				
TO CODE	INITIALED BY                      DATE		SUBJECT NEW BAY AREA AIR QUALITY MANAGEMENT DISTRICT HEXAVALENT CHROME AIR STANDARDS	
400			COMMENTS	
300			Encl: (1) BAAQMD ltr of 20 Jan 88	
			1. Enclosure (1) advises Mare Island Naval Shipyard that it must perform certain tests on the Plating Shop Chrome Plating Operation and provide subsequent information and reports within 60 days (by 20 Mar 88).	
Copy to:				
100				
106				
107			2. Since in-house capability to perform these tests is doubtful, Code 460 is planning to contract out all, or part of this work. This may cause us to miss the 60 day	
380			deadline. The implication is that after 60 days the chrome plating operation may have to shut down until all required information has been provided to the District.	
<del>461.1</del>				
500				
950				
951				
2300				
3480N			3. Code 300 is advised to provide contingency planning in the event the Chrome Plating Operation is stopped. A project to replace existing chrome scrubbers with wet electrostatic precipitators should also be initiated. For further information contact L. Berlot, Code 461.1, telephone extension 2421.	
NRRO (2)				



# BAY AREA AIR QUALITY MANAGEMENT DISTRICT

January 20, 1988

*April 20<sup>th</sup>*

ALAMEDA COUNTY  
Edward R. Campbell  
Shirley J. Campbell  
Chuck Corica  
Frank H. Ogawa

CONTRA COSTA COUNTY  
Paul L. Cooper  
Sunne Wright McPeak

MARIN COUNTY  
Al Aramburu  
(Chairperson)

NAPA COUNTY  
Harold I. Moskowitz

SAN FRANCISCO COUNTY  
Harry G. Britt  
Jim Gonzalez

SAN MATEO COUNTY  
Gus J. Nicolopoulos  
Anna Eshoo

SANTA CLARA COUNTY  
Rod Diridon  
Ralph P. Doetsch, Sr.  
(Vice-Chairperson)  
Roberta H. Hughan  
Susanne Wilson  
(Secretary)

SOLANO COUNTY  
Osby Davis

SONOMA COUNTY  
Helen B. Rudee

Mare Island Naval Shipyard  
Vallejo, CA 94592

Attention: Les Berlot  
Code 461, Stop 032

Application Number: 465  
Equipment Location:  
Plating Shop, Bldg. 225  
Vallejo, CA 93592

Gentlemen:

Your application for an Authority to Construct and/or Permit to Operate the following equipment:

- S-436 Chrome Plating Tank, (T-4), 18.9ft<sup>2</sup>, 820 gal, 5000 amperes, Bldg. 225;
- S-437 Chrome Plating Tank, (T-3), 18.9ft<sup>2</sup>, 820 gal., 5000 amperes, Bldg. 225;
- S-438 Vapor Degreaser, Detrex VS 800 S, 155 gal., Bldg 225;
- S-439 Chrome Plating Tank, (T-6), 17.7ft<sup>2</sup>, 410 gal, 3000 amperes, Bldg. 225;
- S-440 Chromic Acid Anodizing Tank, 7.3 ft<sup>2</sup>, 70 gal, 500 amperes, Bldg. 225;
- S-441 Chrome Plating Tank, (T-5), 12.6 ft<sup>2</sup>, 100 gal, 5000 amperes, Bldg. 225;
- S-443 Paint Stripping Tank, 70 gal, Bldg. 225;
- S-444 Vapor Degreaser, 30" x 66" QZA, Bldg. 225;
- S-445 Paint Stripping Tank, 440 gal, Bldg. 225;
- S-446 Vapor Degreaser, Detrex VS 800 S, 155 gal, Bldg. 225;
- A X-436 Water Scrubber, Trane #U4F3419, 75 GPM, 25,000 CFM;
- A X-439 Water Scrubber, Trane #U4F3419, 75 GPM, 25,000 CFM;
- A X-442 Water Scrubber, Pace, 75 GPM, 18,000 CFM; and
- A X-445 Water Scrubber, Joy Axivane, 75 GPM, 15,000 CFM.

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Mare Island Naval Shipyard  
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has been assigned the above application number and is currently incomplete.

In order to complete our evaluation, we need the following:

1. Please perform District approved source tests for sources S436, S437, S441, S439, S440, A436, and A439. Submit a complete emissions report that includes mass emissions of chromium from plating tanks to scrubbers, mass emissions of chromium from scrubbers, and abatement efficiencies of scrubbers. Please include detailed operating parameters such as concentrations of chrome plating solutions, current density (amperes), type of substrate, size of substrate, and air flow rates. Please contact the District Source Test Section for approval of procedures and scheduling. Please notify Source Test Section and me at least two weeks prior to any testing.
2. Perform a cancer risk screen for hexavalent chromium to determine individual cancer risk caused by these emissions. If individual risk is greater than one in a million, perform a detailed health risk assessment for emissions of hexavalent chromium. Preliminary risk calculations based on Districts source tests #88056 and #88076 indicate a worst case risk of 3 in thousand.
3. Please submit air flow rates for each emission point.
4. Please submit all applicable forms for the other equipment located at this shop. I have enclosed extra G, P and A forms.

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- 5. The abatement devices that currently control chromium emissions may not be adequate. The Air Sources Board and the District are considering new control measures for emissions of hexavalent chromium from plating and anodizing operations. The ARB has proposed a level of control of 99.8% to achieve the lowest emission rate possible for large sources. This level of control is achievable by the use of wet electrostatic precipitators (ESP). The permitted level of control and emission rate will be based upon the source test data, cancer risk assessment, and proposed control measures.

Please submit the above items within 60 days. <sup>of</sup> Your fees will be cancelled. Your application will be acted upon within 60 days of receipt of the above items. Construction of operation or equipment without an Authority to Construct or Permit to Operate can result in appropriate enforcement action.

Please include your application number with any correspondence with the District. If you have any further questions, please call Permit Services at (415) 771-6000, extension 212.

Very truly yours,



Scott B. Lutz  
Air Quality Engineer II  
Permit Services Division

SBL:djw