

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

**Final Negative Declaration for:
California Cascade Fontana, Inc.
Wood Treating Process Modification Project**

April 2006

State Clearinghouse #2005041145

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PREFACE

This document constitutes the Final Negative Declaration (ND) for the California Cascade Fontana, Inc. Wood Treating Process Modification Project. The Draft ND included a detailed project description, the environmental setting for each environmental resource, and an analysis of the each environmental resource on the California Environmental Quality Act (CEQA) checklist including all potentially significant environmental impacts. Based on the Draft ND, no significant adverse environmental impacts were identified associated with the proposed project.

The Negative Declaration was circulated for a 30-day public review and comment period from April 26, 2005 through May 25, 2005. The Negative Declaration is also available at the South Coast Air Quality Management District (SCAQMD), 21865 Copley Drive, Diamond Bar, California 91765-4182 or by phone at (909) 396-2039. The Negative Declaration can also be downloaded by accessing the SCAQMD's CEQA web pages at <http://www.aqmd.gov/ceqa/nonaqmd.html>.

One comment letter was received during the public comment period. The comment letter and responses are included in Appendix E of this document. There have been minor modifications to the proposed project including updated VOC emissions from the CARBO-NT product from new Material Safety Data Sheets (MSDS) for the CARBO-NT. The MSDS revealed, however, that the VOC emissions from CARBO-NT would be less than what was analyzed in the Draft ND and, therefore, the environmental impacts would not change or worsen. The Draft ND has been modified such that it is now a Final ND. Written comments on the project's effects do not result in new avoidable significant effects requiring substantial revision to the Draft ND. Therefore, pursuant to CEQA Guidelines §15073.5(c)(2), recirculation of the Draft ND is not necessary. Comments and responses to the comments did not require any modification to the text of the document.

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CHAPTER 1

PROJECT DESCRIPTION

Introduction
Agency Authority
Project Location
Overview of Current Operations
Proposed Project
Required Permits

INTRODUCTION

California Cascade Fontana, Inc. (CCF) is a commercial business that pressure treats commercial lumber for resale. CCF is an existing pressure treating facility located at 8395 Sultana Avenue within unincorporated San Bernardino, California. CCF is proposing to expand operations by increasing the volume of regulated chemicals transported to and stored at the site. The chemicals transported to and stored at CCF are regulated because of the ammonia content.

Activities at the CCF include the preparation of the lumber for chemical preservation, application of chemical preservatives in pressure vessels, drying of the freshly treated wood under controlled conditions, storage of the treated wood products pending sales, and shipment of products by truck. Products are shipped for resale home improvement type stores. The types of products prepared for resale include pressure treated fence posts, pressure treated fence slats, and pressure treated planking.

In January 2004, CCF converted from a wood treating process using chromium and arsenic based chemical solutions, to a process that uses one copper based chemical (NW-100C), and two ammonia based chemicals (NW-200 and DAC-Q). The current usage of NW-100C, NW-200 and DAC-Q are governed by existing SCAQMD permits.

CCF is proposing modifications to operations to allow for larger quantities of a regulated chemical (NW-200) to be shipped to CCF. Additionally, CCF is proposing that a new chemical, Carbo-NT be allowed for transport and use. This will allow CCF to better diversify their product lines. Altering the operations will require discretionary approvals from SCAQMD as new or modified permits must be filed

AGENCY AUTHORITY

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., requires that the environmental impacts of proposed “projects” be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. The proposed modifications constitute a “project” as defined by CEQA. To fulfill the purpose and intent of CEQA, the SCAQMD is the “lead agency” for this project and has prepared this Negative Declaration to address the potential environmental impacts associated with the proposed project at the CCF.

The lead agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant adverse effect upon the environment (Public Resources Code §21067). Since the SCAQMD has the greatest responsibility for supervising or approving the project as a whole, it was determined that the SCAQMD would be the most appropriate public agency to act as lead agency (CEQA Guidelines §15051(b)).

To fulfill the purpose and intent of CEQA, the SCAQMD has prepared this Negative Declaration to address the potential adverse environmental impacts associated with the proposed project. A Negative Declaration for a project subject to CEQA is prepared when an environmental analysis

of the project shows that there is no substantial evidence that the project may have a significant effect on the environment (CEQA Guidelines §15070(a)).

PROJECT LOCATION

CCF is located at 8395 Sultana Avenue in the unincorporated San Bernardino County, California (Figure 1-1). CCF is an existing wood preserving facility. CCF operated within the South Coast Air Quality Management District area of jurisdiction. The western boundary of CCF is Sultana Avenue. CCF is surrounded by other industrial facilities including other wood preserving facilities. Specifically, Ramirez Pallets occupies the area to the south, Universal Forrest Products occupies the area to the north, Superior Electric occupies the area to the west and Mac Steel occupies the area to the east.

OVERVIEW OF CURRENT OPERATIONS

CCF is in the commercial business of pressure treating lumber for retail sale and is situated within an industrial area on a 10.8-acre site in San Bernardino County (see Figures 1-2 & 1-3). Activities at the CCF include the preparation of the lumber for chemical preservation, application of chemical preservatives in pressure vessels, drying of the freshly treated wood under controlled conditions, storage of the treated wood products pending sales, and shipment of products by truck.

Untreated lumber is transported to CCF by both rail and truck. Upon arrival, the untreated lumber is first processed at CCF by passing it piece-by-piece through an incisor machine. This operation is carried out in a 200 square foot building. The incisor scores the surface of the lumber with numerous knife cuts to facilitate the penetration of the wood preserving chemicals. After incising, forklift trucks move the lumber to the wood treatment area to be loaded into a pressure vessel (retort) that is then flooded with a diluted mixture of the treatment chemicals. After one to three hours of infusion by the chemicals, the lumber is allowed to drip dry on a protected surface. When dry, the treated lumber is stored in one of three 20,000 square foot storage buildings pending shipment to customers. A layout of the wood treatment area is depicted on Figure 1-3.

In January 2004, CCF converted from a wood treating process using chromium and arsenic based chemical solutions, to a process that uses one copper based chemical (NW-100C), and two ammonia based chemicals (NW-200 and DAC-Q). The current usage of NW-100C, NW-200 and DAC-Q are governed by existing SCAQMD permits. These chemicals are regulated by SCACQMD due to the presence of ammonia (NH₃) in their composition.

Chemicals transported into CCF (currently NW-100C and NW-200) are stored in the two 9,400 gallons AST's shown on Figure 1-3. The remainder of the storage tanks within the wood treatment area either store unregulated substances (colorant and borate), or store significantly water-diluted mixtures of NW-100C, NW-200 and/or DAC-Q in the work tanks shown on Figure 1-3. These chemicals are briefly described in the following bullet points:

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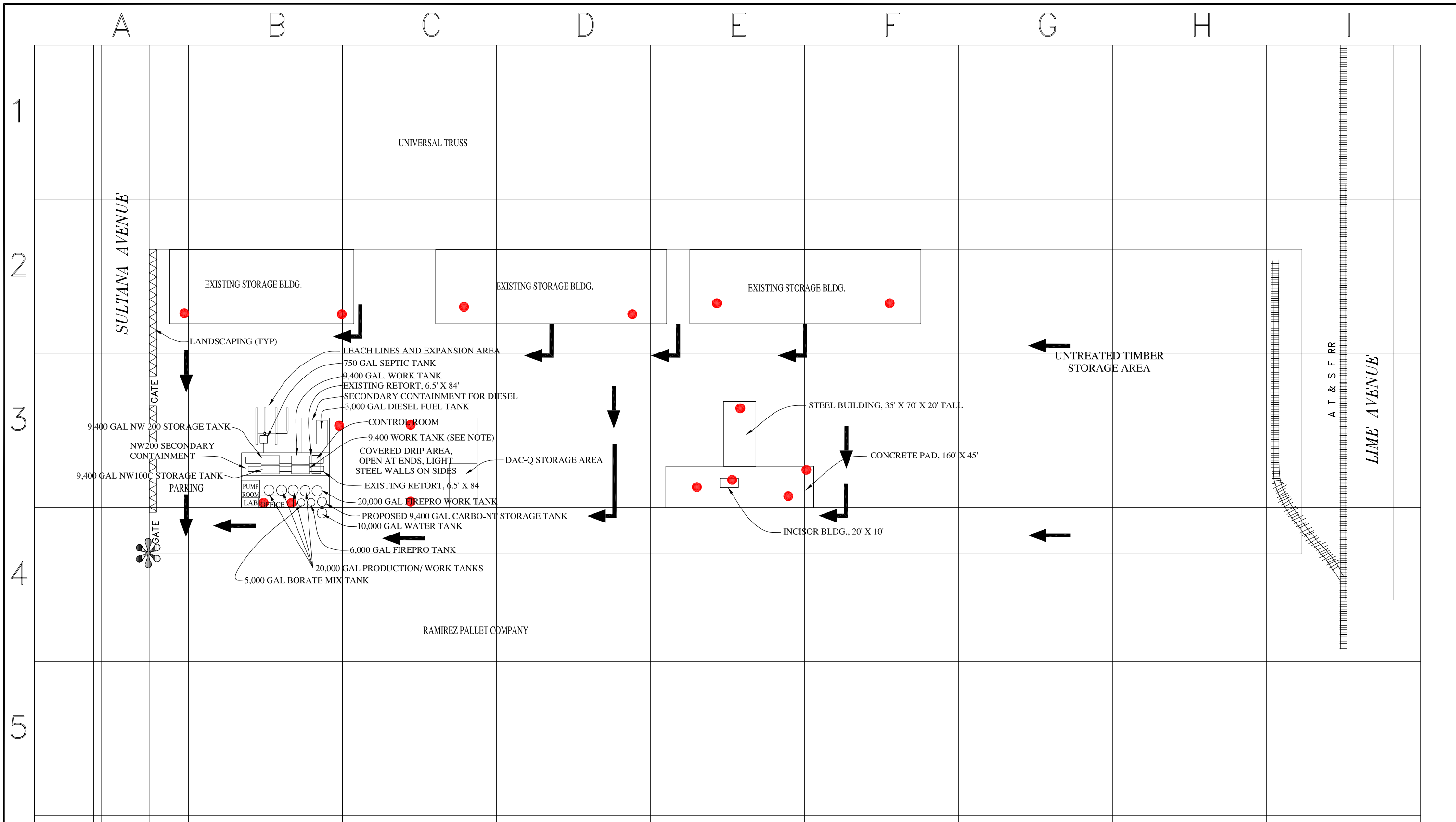
BASE MAP SOURCE: THOMAS BROTHERS

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SITE VICINITY MAP
CALIFORNIA CASCADE FONTANA
FONTANA, CALIFORNIA

PROJECT NO.: 5827.5.001.01	FIGURE NO.
DATE: APRIL 2006	1-1
DRAWN BY: DLB	CHECKED BY: BY

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EXPLANATION

- DESIGNATES EMPLOYEE MEETING POINT
- DESIGNATES ESCAPE ROUTES/SURFACE WATER DRAINAGE FLOW
- APPROXIMATE LOCATION OF FIRE EXTINGUISHER

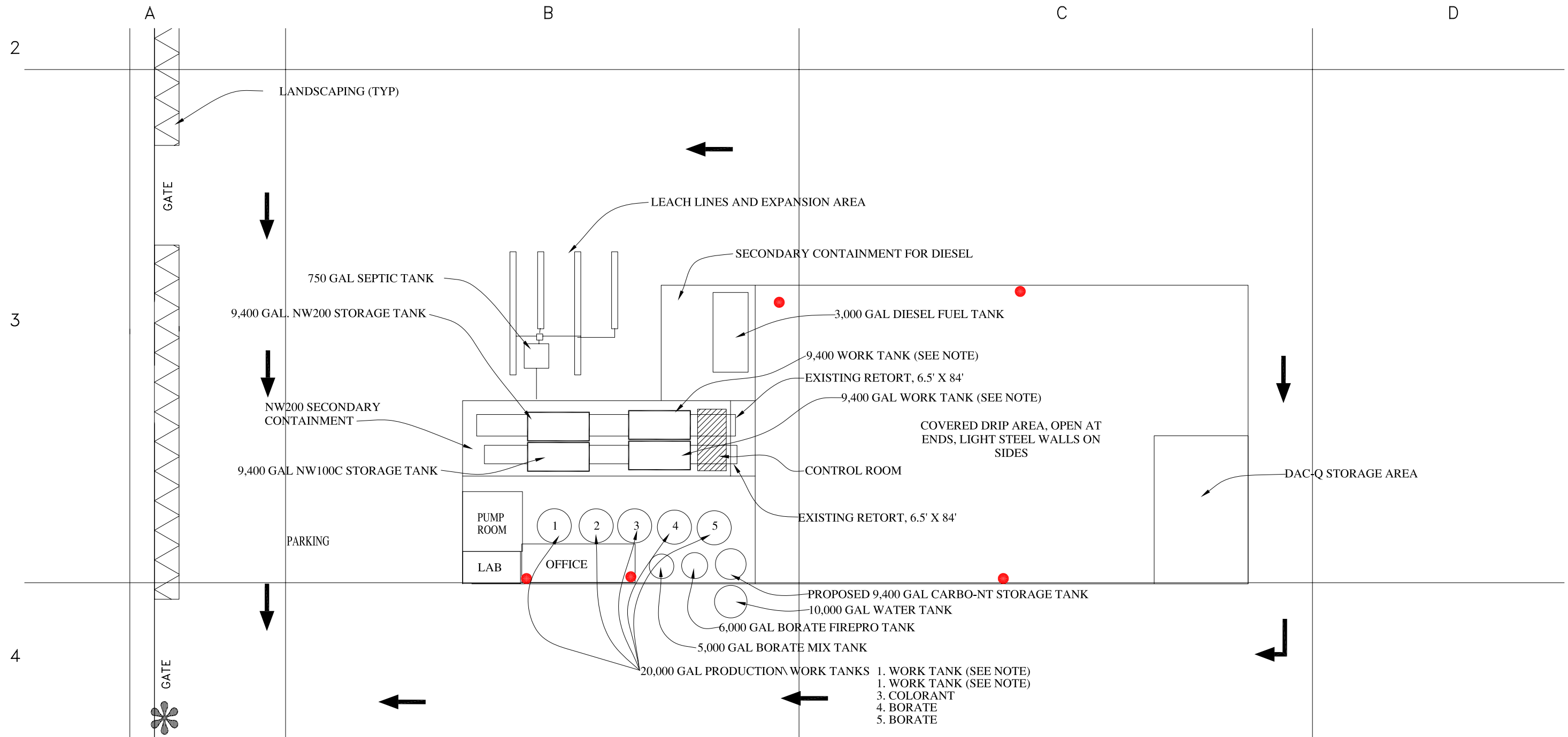


SITE MAP
CALIFORNIA CASCADE FONTANA
FONTANA, CALIFORNIA

PROJECT NO.: 5827.5.001.01	
DATE: APRIL 2006	
DRAWN BY: PC	CHECKED BY: BY

FIGURE NO.
1-2

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EXPLANATION

- DESIGNATES EMPLOYEE MEETING POINT
- DESIGNATES ESCAPE ROUTES
- APPROXIMATE LOCATION OF FIRE EXTINGUISHER



NOTE:
WORK TANKS CONTAIN MIXTURE OF WATER AND
WOOD TREATMENT CHEMICALS
(NW-1-C, NW-200, AND/OR CARBO-NT)



WOOD TREATMENT AREA LAYOUT
CALIFORNIA CASCADE FONTANA
FONTANA, CALIFORNIA

PROJECT NO.: 5827.5.001.01	
DATE: APRIL 2006	
DRAWN BY: PC	CHECKED BY: BY

FIGURE NO.
1-3

NW-100C is a copper based solution with no free ammonia used in the wood preservation process. The monthly throughput for the NW-100C aboveground storage tank (AST) is currently limited to 166,700 gallons (SCAQMD Permit No. F65146). There are no proposed changes for the use of NW-100C at CCF.

- NW-200 is an ammonia and copper based solution with an ammonia content of 9.3 percent used in the wood preservation process. Currently, the transport of NW-200 into the CCF is limited to a maximum quantity of 550 gallons per shipment. The monthly throughput for the NW-200 AST is currently limited to 700 gallons (SCAQMD Permit No. F65145).
- DAC-Q is an ammonium chloride based solution used in the wood preservation process. Currently, the use of DAC-Q within the CCF is limited to the onsite storage of DAC-Q in five 275 gallon totes (SCAQMD Permits No. F65147 through F65151). The use of DAC-Q will be terminated concurrent with approval of the chemical usage changes that are part of the proposed project. Although the use of DAC-Q will be terminated upon approval of the proposed project, existing SCAQMD permits allowing the onsite storage of DAC-Q will be maintained in force in the event the use of DAC-Q is necessary in the future.

PROPOSED OPERATION MODIFICATIONS

The proposed project will result in changes in the transport to and onsite use of regulated chemicals. The proposed project will be limited to increasing the quantities of wood treating chemicals transported to CCF, thus increasing the quantity of wood treated. No new construction is planned for CCF as part of this proposed project. The modifications to the process as part of the proposed project at CCF are as follows:

- CCF is proposing to increase the quantity of shipment of NW-200 from 550 gallons to 6,000 gallons per shipment, and increase the average amount of NW-200 AST monthly throughput from 700 gallons to 10,000 gallons.
- CCF is proposing to obtain shipment and storage review and approval for a new product, with a market trade name of Carbo-NT. Carbo-NT, which is referred to as Carboquat® by the manufacturer, has not been subjected to regulatory review previously and is an ammonium carbonate based solution designed to replace the current usage of DAC-Q. Carbo-NT, as documented by the manufacturer, contains no free ammonia as NH_3 nor contains any other listed chemical components subject to CEQA review. A signed letter from the manufacturer of Carbo-NT attesting that Carbo-NT contains no free ammonia is included in Appendix B. CCF is proposing to initiate the shipment of Carbo-NT in 6,000 gallon quantities and initiate AST storage with an average monthly throughput of 7,500 gallons. CCF will file the necessary SCAQMD permit application forms for the onsite storage of Carbo-NT in a 9,400 gallon AST (location shown on Figure 1-3).

REQUIRED PERMITS

The Proposed Project will require permits to construct and operate from SCAQMD. *A permit to operate is expected to be issued to modify permit conditions of existing equipment. The storage and usage of the new product, Carbo-NT, will require a permit to construct and operate which may be issued concurrently based on the engineering review.* ~~Since no new construction is anticipated in conjunction with this project, no additional permitting requirements are anticipated.~~

CHAPTER 2

ENVIRONMENTAL CHECKLIST FORM

Introduction
General Information
Potentially Significant Impact Areas
Determination
Environmental Checklist and Discussion
 Aesthetics
 Agriculture Resources
 Air Quality
 Biological Resources
 Cultural Resources
 Energy
 Geology/Soils
 Hazards and Hazardous Materials
 Hydrology/Water Quality
 Land Use/Planning
 Mineral Resources
 Noise
 Population/Housing
 Public Services
 Recreation
 Solid/Hazardous Waste
 Transportation/Traffic
Mandatory Findings of Significance
References
Acronyms
Glossary

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	California Cascade Fontana Wood Treating Process Modification Project
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
Contact Person:	Michael Krause
Contact Phone Number:	(909) 396-2706
Project Sponsor's Name:	California Cascade Fontana
Project Sponsor's Address:	8395 Sultana Avenue Fontana, CA 92335
General Plan Designation:	Regional Industrial
Zoning:	IR-Regional Industrial
Description of Project:	CCF is proposing to increase the quantity of shipment of NW-200 from 550 gallons to 6,000 gallons per shipment, and increase the average amount of NW-200 AST monthly throughput from 700 gallons to 10,000 gallons. Additionally, CCF is proposing to obtain shipment and storage review and approval for a new product, with a market trade name of Carbo-NT.
Surrounding Land Uses and Setting:	Sultana Avenue borders CCF to the west. A branch line of the Southern Pacific Railroad (Union Pacific) borders CCF to the east. Industrial facilities and other wood preserving facilities border CCF to the north and south.
Other Public Agencies Whose Approval is Required:	None

POTENTIALLY SIGNIFICANT IMPACT AREAS

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

- | | | |
|--|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/
Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Solid/Hazardous Waste | <input type="checkbox"/> Transportation/
Traffic | <input type="checkbox"/> Mandatory
Findings of
Significance |

DETERMINATION

On the basis of this initial evaluation:

- I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: June 15, 2005

Signature: _____

Steve Smith

Steve Smith, Ph.D.
Program Supervisor
Planning, Rules, and Area Sources

ENVIRONMENTAL CHECKLIST AND DISCUSSION

	Potentially Significant Impact	Less Than Significant Impact	No Impact
I. AESTHETICS			
Would the project:			
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

1.1 Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

- The project will block views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

1.2 Environmental Setting and Impacts

a), b) and c) No new site construction or building permits are anticipated for the proposed chemical transport and storage changes proposed for CCF. Additionally, the proposed bulk transportation of NW-200 and Carbo-NT will reduce the numbers of truck trips to CCF due to eliminating the use of DAC-Q. This proposed project will allow for the use of tanker trucks instead of delivery type trucks. These trucks will also allow for fewer shipments to CCF. This will reduce the visual impact of transport to CCF along scenic highways. Views of CCF from adjacent properties will not change. The permits being processed as part of this proposed project are not anticipated to require a vapor recovery system or Best Available Control Technology (BACT). However, if BACT is required, off the shelf hardware can be used similar to a carbon

absorber that can be installed on existing equipment. The installation of this BACT would be done with existing staff and would not require construction. Therefore, no visual impacts are expected from the proposed project.

d) No new site construction or building permits are anticipated for the proposed upgrades to CCF. The proposed project components will be located within existing industrial facilities, which are currently lighted at night for nighttime operations. The proposed changes do not required any additional or increased lighting. No increases of light and glare are anticipated from the modifications to CCF operations.

1.3 Mitigation Measures

Based on the above information, no significant adverse impacts to aesthetics are expected to occur as a result of modifications to CCF. Therefore, no mitigation is necessary or proposed.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
II. AGRICULTURE RESOURCES			
Would the project:			
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.1 Significance Criteria

Project related impacts on agricultural resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.

- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural uses.

2.2 Environmental Setting and Impacts

a), b), and c) There are no agricultural resources, (i.e., food crops grown for commercial purposes), located in or near the vicinity of CCF. No new site construction or building permits are anticipated for the proposed upgrades to CCF. The proposed CCF changes will not involve construction outside of the existing boundaries of CCF and no agricultural resources are located within CCF. The zoning of CCF will remain general industrial. The transportation of bulk chemicals to CCF will continue to require using existing roadways and highways. No existing agricultural land will be converted to non-agricultural land uses. For the same reasons identified here, the proposed project will not conflict with any Williamson Act contracts. Therefore, the proposed project will have no significant adverse impacts on agricultural resources.

2.3 Mitigation Measures

Based on the above information, no significant adverse impacts to agricultural resources are expected to occur as a result of modifications to CCF. Therefore, no mitigation is necessary or proposed.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
III. AIR QUALITY			
Would the project:			
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | |
|--|--------------------------|--------------------------|-------------------------------------|
| d) Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

3.1 Significance Criteria

Air quality impacts will be evaluated and compared to the significance listed in Table 2-1. If impacts equal or exceed any of the criteria in Table 2-1, they will be considered significant.

**TABLE 2-1
AIR QUALITY SIGNIFICANCE THRESHOLDS**

Mass Daily Thresholds	
Pollutant	Construction
NO _x (Oxides of Nitrogen)	100 lbs/day
VOCs (Volatile Organic Compounds)	75 lbs/day
PM ₁₀ (Particulate Matter)	150 lbs/day
Sox (Sulfur Oxide)	150 lbs/day
CO (Carbon Monoxide)	550 lbs/day
Lead	3 lbs/day
Toxic Air Contaminants (TACs) and Odor Thresholds	
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Hazard Index ≥ 1.0 (project increment) Hazard Index ≥ 3.0 (facility-wide)
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402
Ambient Air Quality for Criteria Pollutants	
NO ₂ 1-hour average annual average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.25 ppm (state) 0.053 ppm (federal)
PM ₁₀ : 24-hour average annual geometric mean annual arithmetic mean	10.4 ug/m ³ (recommended for construction) 2.5 ug/m ³ (operation) 1.0 ug/m ³ 20 ug/m ³
Sulfate: 24-hour average	1 ug/m ³
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) 9.0 ppm (federal)

3.2 Environmental Setting and Impacts

a) and f) An inventory of existing emissions from industrial facilities is included in the baseline inventory in the Air Quality Management Plan (AQMP). The AQMP identifies emission reductions from existing sources and air pollution control measures that are necessary in order to comply with the state and federal ambient air quality standards (SCAQMD, 2003). The control strategies in the AQMP are based on projections from the local general plans provided by the cities in the district. Projects that are consistent with the local General Plans are generally considered to be consistent with the air quality related regional plans. The San Bernardino General Plan dated October 11, 1999 was completed during a time when CCF was open and in production. CCF is within an area of San Bernardino County zoned for general industrial uses. The proposed project is considered to be consistent with the air quality related regional plans since it is consistent with the San Bernardino County General Plan.

The 2003 AQMP demonstrates that applicable ambient air quality standards can be achieved within the timeframes required under federal law. This proposed project must comply with applicable SCAQMD rules and regulations measures for new or modified sources. For example, new emission sources associated with the proposed project are required to comply with the SCAQMD's Regulation XIII-New Source Review requirements that include the use of BACT. The project proponent must also comply with prohibitory rules, such as Rule 403, for the control of fugitive dust. By meeting these requirements, the project will be consistent with the goals and objectives of the AQMP to improve air quality in the Basin. Therefore, the proposed project is consistent with the applicable air quality management plans and is not expected to diminish an existing air quality rule or a future compliance requirement.

b) The proposed CCF changes will not violate any air quality standard or contribute to an existing or projected air quality violation. The proposed project includes applications for new SCAQMD permits for the storage and usage of the NW-200 and Carbo-NT quantities discussed herein. The current and proposed operations at CCF do not emit any toxic air contaminants. The proposed CCF changes will not require any new pumps or additional tanks (stationary sources) that might generate pollutant emissions. Regarding the mobile source of emissions via the truck transport of chemicals to CCF, the proposed changes in chemical usage will result in a reduced number of truck trips to CCF per year as summarized in Table 2-2.

**TABLE 2-2
SUMMARY OF TRUCK TRIPS PER YEAR**

Chemical	Current Transport Quantity	Current Trips/Year	Proposed Transport Quantity	Proposed Trips/Year	Net Change in Trips/Year
DAC-Q	1,100 gallons	48	0	0	-48
NW-200	500 gallons	15	6,000 gallons	15	0
Carbo-NT	0	0	6,000 gallons	20	+20
TOTAL TRIPS/YEAR		63		35	-28

Existing mobile source emissions from truck transport of chemicals to CCF, an approximately 380-mile one-way trip originating in Stockton, California. Truck vehicle daily mass emissions were calculated using the most conservative emission factors obtained from the weighted EMFAC 2002 emission factors for both On-Road Vehicles/Delivery Trucks (vehicles greater than 8,500 pounds) and emission factors specific to Heavy-Heavy Duty Diesel Trucks. The purpose for calculating emissions using two separate vehicle category types is because both vehicle types, delivery trucks and heavy-heavy duty diesel trucks, will be used in future deliveries as part of the proposed project, whereas the existing transportation to the facility is being accomplished through the use of delivery trucks. For a “worst-case” scenario, the more conservative factors of the heavy-heavy duty category are used to calculate transportation emissions from the proposed project. The on-road vehicle emission factors are derived from CARB’s BURDEN 2002 models for the year 2005. The calculated current and proposed daily truck mass emissions rates are summarized in Table 2-3 and are compared to the SCAQMD Air Quality Significance Thresholds.

Currently no more than one truck trip per day occurs transporting process chemicals to CCF. The proposed project will result in no more than one truck trip per day delivering process chemicals to CCF. Based on the comparison between current daily emissions and future expected emissions, there is a slight, but insignificant increase in daily emissions per trip. The worst case scenario would be the unlikely event that two trips to CCF would occur in one day. In this theoretical scenario the total annual truck trips would remain unchanged. The truck trips to this facility originate from outside the SCAQMD region but transportation emissions are projected to be low and would not be significant.

**TABLE 2-3
INDIRECT VEHICLE MASS EMISSION PROJECT CONSEQUENCES**

Transportation Scenario	Air Quality Parameters and Calculated Daily Vehicle Mass Emission Rates (lbs/day)			
Current Transportation (On Road Vehicles–Delivery Trucks)	CO	PM10	NO _x	SO _x
DAC-Q/NW-200 (lbs/day for trips per day completed)	7.9	0.19	10.7	0.09
Proposed Transportation (Heavy Heavy Duty Diesel Trucks)	CO	PM10	NO _x	SO _x
DAC-Q (0 trips)	0	0	0	0
Carbo-NT/NW-200 (lbs/day for trips per day completed)	2.4	0.3	15.8	0.15
SCAQMD Significance Thresholds (lbs/day from Table 2-1)	550	150	55	150
Any Significance Thresholds Exceeded?	NO	NO	NO	NO

Regarding the reduction in the number of annual chemical truck delivery trips to CCF, Table 2-4 summarizes the calculated annual emissions from the delivery vehicles currently transporting chemicals to CCF. Using the Heavy Heavy Duty Diesel Trucks emission estimates, the annual truck emissions for the proposed delivery scenario of chemicals to CCF were also calculated and are summarized in Table 2-4. When the existing and proposed emissions are compared, a

substantial reduction in annual emissions is expected as a result of implementing the proposed project. This analysis of annual air quality effects is provided for information only as air quality impacts are based on the effects of the proposed project on daily emissions.

**TABLE 2-4
ANNUAL AIR QUALITY EFFECT OF THE PROPOSED PROJECT**

Transportation Scenario	Air Quality Parameters and Calculated Annual Vehicle Mass Emission Rates (lbs/year)			
	CO	PM10	NO _x	SO _x
Current Transportation				
DAC-Q/NW-200 (63 trips/year)	502	12	674	5.9
Proposed Transportation				
DAC-Q (0 trips/year)	0	0	0	0
Carbo-NT/NW-200 (35 trips/year)	84	10.5	553	5.4
Total Emission Change (lbs/year)	-418	-1.5	-121	-0.5

c) CCF changes will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. As shown in Table 2-3, project-specific emissions are substantially less than the applicable daily significance thresholds and therefore are not considered to be cumulatively considerable as defined in CEQA Guidelines §15065(a)(3). Therefore, the proposed project is not expected to generate significant adverse cumulative air quality impacts.

d), e) and f) Air quality modeling that has been completed as part of the permitting process for this proposed project. The purpose of the modeling was to determine the quantity of fugitive ammonia (NH₃) released from the stationary tank source (NW-200). The air quality modeling indicates that applicable air quality standards will be maintained through these CCF changes. Modeling is discussed relative to sensitive receptors because modeling shows whether or not sensitive receptors are affected by a particular project. Through this modeling, sensitive receptors will not be apparently exposed to substantial pollutant concentrations. Air emission modeling completed for the increased usage of NW-200 and the proposed usage of Carbo-NT predicts a less than one pound per day onsite emission rate of ammonia (NH₃) for the NW-200 and water for the Carbo-NT onsite storage. In addition, since there is little to no odor associated with the chemicals proposed for usage as reported in the Material Safety Data Sheets, no creation of objectionable odors is anticipated. The permits being processed as part of this proposed project are not anticipated to require a vapor recovery system or Best Available Control Technology (BACT). However, if BACT is required, off the shelf hardware can be used similar to a carbon absorber that can be installed on existing equipment. The installation of this BACT would be done with existing staff and would not require construction.

Stationary source emissions of concern are limited to fugitive ammonia (NH₃) from the NW-200. The stationary fugitive emissions are projected to be less than one pound per day. Due to the ammonia (NH₃) content of the NW-200, the SCAQMD is the lead agency. Since the fugitive

ammonia (NH₃) does not exceed the *SCAQMD's threshold for requiring* lowest achievable emission rate (LAER) *at one pound per day*, they are deemed fugitive. No air quality offsets are required for CCF.

3.3 Mitigation Measures

No significant adverse impacts to air quality are expected to occur as a result of proposed project. Therefore, no mitigation is necessary or proposed.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES			
Would the project:			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

preservation policy or ordinance?

- | | | | |
|--|--------------------------|--------------------------|-------------------------------------|
| f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|

4.1 Significance Criteria

The impacts on biological resources will be considered significant if any of the following criteria apply:

- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.
- The project adversely affects aquatic communities through construction or operation of the project.

4.2 Environmental Setting and Impacts

a), b), c), d), e), and f) The proposed project would be located entirely within the existing boundaries of the CCF, which has already been developed, therefore, no conflict with local, regional or state Conservation Plans are expected. The area contains industrial activities and does not support riparian habitat, habitat for any threatened or endangered species, federally protected wetlands, or migratory corridors.

4.3 Mitigation Measures

No mitigation measures are required since no significant adverse impacts to biological resources are expected.

Potentially Significant Impact	Less Than Significant Impact	No Impact
---------------------------------------	-------------------------------------	------------------

V. CULTURAL RESOURCES

Would the project:

- | | | | |
|--|--------------------------|--------------------------|-------------------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|

§15064.5?

- | | | | |
|---|--------------------------|--------------------------|-------------------------------------|
| b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Disturb any human remains, including those interred outside a formal cemeteries? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

5.1 Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group.
- Unique paleontological resources are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

5.2 Environmental Setting and Impacts

a), b), c), and d) Because the proposed project does not include construction of any structures, it will result in no ground-disturbing activities and no significant adverse impacts to equipment and structures over 50 years of age, which may be culturally significant, are anticipated to occur. No existing structures at the CCF are considered architecturally or historically significant, as defined under CEQA Guidelines §15064.5, i.e., no structures are eligible for listing in the California Register of Historical Resources or included in a local register of historic resources. The entire CCF has been previously graded and developed. No known human remains or burial sites have been identified at CCF during previous construction activities. The larger CCF structures and equipment are supported on existing concrete foundations. No adverse impacts to cultural resources are expected since no known cultural resources are located within the CCF.

5.3 Mitigation Measures

The impacts of the proposed project on cultural resources are less than significant so that no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VI. ENERGY			
Would the project:			
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

6.1 Significance Criteria

The impacts to energy and mineral resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

6.2 Environmental Setting and Impacts

a) and e) The proposed changes to CCF and transportation of bulk chemicals is not expected to conflict with any adopted energy conservation plans or standards because there is no known energy conservation plan or standards that would apply to CCF. Since the proposed project will allow for greater utilization of the existing process without the addition of a large quantity of new treatment cycles, the proposed project is not expected to greatly increase the output or energy demands of CCF. No increase in electricity demand is expected during the modifications

to the equipment at CCF that might affect peak demand period for electricity or other forms of energy.

b), c) and d) CCF is currently served by Southern California Edison (SCE) for electricity supply. No new pumps or other equipment are planned for installation that could increase the energy demand from CCF. Additionally, changes in quantities of NW-200 transported to CCF are expected to produce operational changes in the finished product and not the overall output. Therefore, the change in NW-200 transported to CCF is not anticipated to produce a significant increase in energy usage. Therefore, no significant impacts on energy are expected during this period. The permits being processed as part of this proposed project are not anticipated to require a vapor recovery system or Best Available Control Technology (BACT). However, if BACT is required, off-the-shelf hardware can be used similar to a carbon absorber that can be installed on existing equipment. The installation of this BACT would be done with existing staff and would not require construction. No additional energy is typically required to use this type of BACT.

6.3 Mitigation Measures

The impacts of the proposed project on energy resources are less than significant so that no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS			
Would the project:			
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> • Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> • Strong seismic ground shaking? 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> • Seismic-related ground failure, including liquefaction? 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> • Landslides? 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

topsoil?

- | | | | |
|---|--------------------------|--------------------------|-------------------------------------|
| c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

7.1 Significance Criteria

The impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, and compaction or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect CCF, e.g., landslides, mudslides.

7.2 Environmental Setting and Impacts

a) CCF is located within the City of Fontana, San Bernardino County and is located within a seismically active region. The most significant potential geologic hazard at CCF is estimated to be seismic shaking from future earthquakes generated by active or potentially active faults in the region. Table 2-5 identifies those faults considered important to CCF in terms of potential for future activity. Seismic records have been available for the last 200 years, with improved instrumental seismic records available for the past 50 years. Based on a review of earthquake data, most of the earthquake epicenters occur along the Whittier-Elsinore, San Andreas,

Newport-Inglewood, Malibu-Santa Monica-Raymond Hills, Palos Verdes, Sierra Madre, San Fernando, Elysian Park-Montebello, and Torrance- faults (Jones and Hauksson, 1986). All these faults are elements of the San Andreas Fault system. Past experience indicates that there has not been any substantial damage, structural or otherwise to CCF as a result of earthquakes. Table 2-6 identifies the historic earthquakes over magnitude 4.5 in Southern California, between 1915 and the present, along various faults in the region.

**TABLE 2-5
MAJOR ACTIVE/POTENTIALLY ACTIVE FAULTS IN SOUTHERN CALIFORNIA**

Fault Zone	Distance to Fault (miles)	Maximum Earthquake Magnitude	Peak Site Acceleration (g)
SAN JACINTO- San Bernardino	6	6.7	0.49
CUCAMONGA	7	7	0.42
SAN ANDREAS - San Bernardino	11	7.3	0.32
SAN ANDREAS - Southern	11	7.4	0.33
SAN JOSE	13	6.5	0.19
CLEGHORN	14	6.5	0.16
SAN JACINTO-San Jacinto Valley	15	6.9	0.19
SAN ANDREAS - 1857 Rupture	15	7.8	0.33
SAN ANDREAS - Mojave	15	7.1	0.22
SIERRA MADRE	15	7	0.22
CHINO-CENTRAL AVE. (Elsinore)	17	6.7	0.16
NORTH FRONTAL FAULT ZONE	18	7	0.18
WHITTIER	20	6.8	0.13
ELSINORE-GLEN IVY	20	6.8	0.13
ELYSIAN PARK THRUST	25	6.7	0.10
CLAMSHELL-SAWPIT	25	6.5	0.08
RAYMOND	31	6.5	0.06
ELSINORE-TEMECULA	33	6.8	0.07
COMPTON THRUST	36	6.8	0.06
VERDUGO	37	6.7	0.06
HELENDALE - S. LOCKHARDT	38	7.1	0.08

**TABLE 2-5 (CONCLUDED)
MAJOR ACTIVE/POTENTIALLY ACTIVE FAULTS IN SOUTHERN CALIFORNIA**

Fault Zone	Distance to Fault (miles)	Maximum Earthquake Magnitude	Peak Site Acceleration (g)
NORTH FRONTAL FAULT ZONE	39	6.7	0.05
SAN JACINTO-ANZA	40	7.2	0.08
NEWPORT-INGLEWOOD (L.A.Basin)	43	6.9	0.05
PINTO MOUNTAIN	43	7	0.06
NEWPORT-INGLEWOOD (Offshore)	44	6.9	0.05
HOLLYWOOD	44	6.4	0.04
SAN GABRIEL	49	7	0.05
SIERRA MADRE (San Fernando)	49	6.7	0.04
LENWOOD-LOCKHART-OLD WOMAN SPRGS	50	7.3	0.06
PALOS VERDES	52	7.1	0.05
JOHNSON VALLEY (Northern)	54	6.7	0.03
SANTA MONICA	54	6.6	0.03
NORTHRIDGE (E. Oak Ridge)	55	6.9	0.04
ELSINORE-JULIAN	56	7.1	0.05
SAN ANDREAS - Coachella	59	7.1	0.04
LANDERS	59	7.3	0.05

Notes: g = acceleration of gravity.

**TABLE 2-6
SIGNIFICANT HISTORICAL EARTHQUAKES IN SOUTHERN CALIFORNIA**

Date	Location (Epicenter)	Magnitude
1915	Imperial Valley	6.3
1925	Santa Barbara	6.3
1920	Inglewood	4.9
1933	Long Beach	6.3
1940	El Centro	6.7

TABLE 2-6 (CONCLUDED)
SIGNIFICANT HISTORICAL EARTHQUAKES IN SOUTHERN CALIFORNIA

Date	Location (Epicenter)	Magnitude
1940	Santa Monica	4.7
1941	Gardena	4.9
1941	Torrance	5.4
1947	Mojave Desert	6.2
1951	Imperial Valley	5.6
1968	Borrego Mountain	6.5
1971	Sylmar	6.4
1975	Mojave Desert	5.2
1979	Imperial Valley	6.6
1987	Whittier	5.9
1992	Joshua Tree	6.3
1992	Landers	7.4
1992	Big Bear	6.5
1994	Northridge	6.7
1999	Hector Mine	7.1

Sources: Bolt (1988), Jennings (1985), Gere and Shah (1984), Source Fault Hazard Zones in California (1988), Yanev (1974), and personnel communication with the California Division of Mines and Geology.

San Jacinto – San Bernardino Fault Zone: The San Jacinto fault system cross the Los Angeles Basin about six miles to the northeast of CCF. The San Jacinto fault is a major active fault that is considered capable of producing a 6.7 magnitude earthquake.

Sierra Madre Fault System: The Sierra Madre fault system extends for approximately 60 miles along the northern edge of the densely populated San Fernando and San Gabriel valleys (Dolan, et al., 1995) and includes faults that have participated in the Quaternary uplift of the San Gabriel Mountains. The fault system is complex and appears to be broken into five or six segments each 10 to 15 miles in length (Ehlig, 1975). The fault system is divided into three major faults by Dolan, et al. (1995), including the Sierra Madre, the Cucamonga and the Clamshell-Sawpit faults. The San Jose fault is a southwesterly extension of the Cucamonga fault. The Sierra Madre fault is considered capable of producing a 7.3 magnitude earthquake every 800 years (Dolan, et al., 1995).

San Andreas Fault Zone: The San Andreas fault is located on the north side of the San Gabriel Mountains trending east-southeast as it passes the Los Angeles Basin. This fault is recognized as the longest and most active fault in California. It is generally characterized as a right-lateral strike-slip fault which is comprised of numerous sub-parallel faults in a zone over two miles wide. There is a high probability that southern California will experience a magnitude 7.0 or greater earthquake along the San Andreas or San Jacinto fault zones, which could generate strong ground motion within CCF. There is a five to twelve percent probability of such an event

occurring in southern California during any one of the next five years and a cumulative 47 percent chance of such an event occurring over a five year period (Reich, 1992).

Whittier-Elsinore Fault Zone: The Whittier-Elsinore Fault is located about 20 miles southwest of CCF. The Whittier fault is one of the more prominent structural features in the Los Angeles Basin. It extends from Turnbull Canyon near Whittier, southeast to the Santa Ana River, where it merges with the Elsinore fault. Yerkes (1972) indicated that vertical separation on the fault in the upper Miocene strata increases from approximately 2,000 feet at the Santa Ana River northwestward to approximately 14,000 feet in the Brea-Olinda oil field. Farther to the northwest, the vertical separation decreases to approximately 3,000 feet in the Whittier Narrows of the San Gabriel River. The fault also has a major right-lateral strike slip component. Yerkes (1972) indicates streams along the fault have been deflected in a right-lateral sense from 4,000 to 5,000 feet. The fault is capable of producing a maximum credible earthquake event of about magnitude 7.0 every 500 to 700 years.

In addition to the known surface faults, shallow-dipping concealed “blind” thrust faults have been postulated to underlie portions of the Los Angeles Basin. Because there exist few data to define the potential extent of rupture planes associated with these concealed thrust faults, the maximum earthquake that they might generate is largely unknown.

No faults or fault-related features are known to exist in the immediate area of CCF. CCF is not located within a State of California Earthquake Fault Hazard Zone and is not expected to be subject to significant surface fault displacement. Therefore, no significant impacts to CCF are expected from seismically-induced ground rupture.

Based on the historical record, it is highly probable that earthquakes will affect the Los Angeles region in the future. Research shows that damaging earthquakes will occur on or near recognized faults which show evidence of recent geologic activity. The proximity of major faults to CCF increases the probability that an earthquake may impact CCF. There is the potential for damage in the event of an earthquake. Impacts of an earthquake could include structural failure, spills, etc. from existing structures. The hazards of a release during an earthquake are addressed in the Hazards and Hazardous Materials section. However, since there are no new structures planned for construction as part of this proposed project, no new structures would be affected by ground shaking or ground failure including liquefaction and landslide.

b) Concrete foundations presently support several of the structures and equipment currently located within CCF. Most of CCF roads, parking area, and raw material storage areas have been paved. The western boundary of CCF has also been landscaped. CCF is relatively flat. No unstable earth conditions, changes in topography or changes in geologic substructures are anticipated to occur with CCF because no grading and excavation will be involved. No significant impacts on topography and soils are expected.

c) and d) Liquefaction would most likely occur in unconsolidated granular sediments that are water saturated less than 30 feet below ground surface (Tinsley et al., 1985). The Geologic Hazard Overlay of the San Bernardino County Official Land Use Plan (plotted 2004), indicates that the site is not within an area that is susceptible to liquefaction or landsliding.

e) The proposed project is expected to generate no additional wastewater. Wastewater is currently discharged to a permitted septic system currently in place within CCF (Figures 1-2 & 1-3). Waste from the chemical processes within CCF are collected and reused, not discharged into the septic system. Since there are no plans to increase the size of the work force at CCF, increased industrial discharge to the septic system will not take place and thus, no modifications to the septic system are anticipated for this proposed project.

7.3 Mitigation Measures

No mitigation measures are required for the construction/operation of the project since no significant adverse impacts to geology or soils are expected.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS			
Would the project:			
a) Create a significant hazard to the public or the environment through the routine transport, use, disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | | |
|----|---|--------------------------|--------------------------|-------------------------------------|
| f) | for people residing or working in the project area?
For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) | Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) | Significantly increased fire hazard in areas with flammable materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

8.1 Significance Criteria

The impacts associated with hazards will be considered significant if any of the following occur:

- The proposed project increases the quantity of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with the compounds on the Regulated Substances List and Threshold Quantities for Accidental Release Prevention (ARP List), California Code of Regulations, Title 19, Division 2, Chapter 4.5 (ARP Regulations). Hazardous materials used in excess of quantities contained in the ARP List require the preparation of a Risk Management Plan (RMP) under the California ARP regulations. Pursuant to the California ARP regulations, the RMP is to be submitted to the Administering Authority, which based on location of CCF, is the San Bernardino Country Fire Department.
- The proposed project creates a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, either during transport, or from onsite storage and usage.
- The proposed project impairs implementation of or physically interferes with an adopted emergency response or emergency evacuation plan.

8.2 Environmental Setting and Impacts

a) and b) CCF is in the business of preserving wood products through a chemical treatment process that utilizes copper and ammonia based chemicals that are transported into CCF. The hazardous materials classification for the chemicals transported to and used at CCF is governed by the ammonia content of the individual chemicals, since all of the chemicals imported to,

stored and used at CCF are solutions containing varying percentages of chemical components and water.

For the purposes of this Negative Declaration, the hazards and hazardous materials analysis will be conducted for the following proposed CCF changes:

- Increased quantities of storage and transport of NW-200, a chemical solution with an ammonia content of 9.3 percent by weight. NW-200 is regulated under the ARP List due to ammonia (NH₃) content. We will refer to this NH₃ containing compound as NW-200 throughout this document. The potential impacts due to an accidental release of ammonia during transport, transfer to storage, or ruptured storage.
- New transport and storage of Carbo-NT, a chemical solution with no free ammonia. While presented herein for informational and disclosure purposes, the transport and onsite storage of Carbo-NT, is not subject to the requirements of the California ARP regulations.

Hazard Analysis

The onsite storage of the increased quantity of NW-200 does not increase the potential of an accidental onsite spill and release, as compared to the current quantities of NW-200 stored onsite. The greatest potential for an onsite spill and release event has been previously identified to be associated with the filling operation for the NW-200 AST. Relative to the hazards associated with a potential onsite spill and release event for NW-200, a report was previously prepared by PARSONS (“Air Dispersion Modeling Study, Worst-Case Release Scenario for Storage of Ammoniacal (NW-200) Cooper Solution, September 2003) to evaluate the risks of an NW-200 spill and release event associated with the existing 9,400 gallon NW-200 AST.

The PARSONS study evaluated the potential for air dispersion health risk effects associated with onsite releases from the NW-200 AST operations. A copy of the PARSONS air dispersion modeling study is included in Appendix D. The conclusions from the PARSONS study indicated that based on the worst case scenario outcome from an NW-200 AST overfilling event, the NW-200 storage and handling process is eligible for a RMP Program Level 1 classification. In the event of a worst-case release, concentrations at the fence line would not be high enough to reach levels that would cause serious health effects. Based on the proposed increase in the shipment and usage of NW-200, the potential for an overfilling event associated with the NW-200 AST is not increased since the filling operations will remain unchanged. Additionally, based on the increase shipment quantities of NW-200, a reduction in the number of shipments and fill events would not increase the likelihood of and overfilling event. Consequently, the enclosed air dispersion modeling study is valid for the proposed NW-200 chemical usage changes.

As required under the California ARP Regulations, a RMP was previously prepared for the onsite storage of NW-200. The current RMP was submitted to the San Bernardino County Fire Department in May 2004. It is assumed that changes in chemical usage proposed by CCF may require a revision of the current RMP. A copy of the RMP is included in Appendix E.

The permits being processed as part of this proposed project are not anticipated to require a vapor recovery system or Best Available Control Technology (BACT). However, if BACT is required, off the shelf hardware can be used similar to a carbon absorber that can be installed on existing equipment. The installation of this BACT would be done with existing staff and would not require construction.

Transportation Release Scenario

CCF will receive truck shipments of NW-200 from a rail terminal located in Stockton, California. The distance from the Stockton supply location to CCF is approximately 400 miles. Deliveries of NW-200 would be made to CCF by tanker truck via public roads. The capacity of the tanker trucks is 5,000 to 6,000 gallons. Based on the projected annual usage of NW-200 (100,000 gallons per year), delivery frequency from the supplier to CCF would be one to two trucks per month (approximately 15 trucks per year). Regulations for the transport of hazardous materials by public highway are described in 49 Code of Federal Regulations 173 and 177.

Although trucking of hazardous materials is regulated for safety by the U.S. Department of Transportation, there is a possibility that a tanker truck could be involved in an accident spilling its contents. The factors that enter into accident statistics include distance traveled and type of vehicle or transportation system. Factors affecting automobiles and truck transportation accidents include the type of roadway, presence of road hazards, vehicle type, maintenance and physical condition, and driver training. A common reference frequently used in measuring risk of an accident is the number of accidents per million miles traveled. Complicating the assessment of risk is the fact that some accidents can cause significant damage without injury or fatality.

Every time hazardous materials are moved from the site of generation, opportunities are provided for accidental (unintentional) release. A study conducted by the U.S. EPA indicates that the expected number of hazardous materials spills per mile shipped ranges from one in 100 million to one in one million, depending on the type of road and transport vehicle used. The U.S. EPA analyzed accident and traffic volume data from New Jersey, California, and Texas, using the Resource Conservation and Recovery Act Risk/Cost Analysis Model and calculated the accident involvement rates presented in Table 2-4. This information was summarized from the Los Angeles County Hazardous Waste Management Plan (Los Angeles County, 1988).

In the study completed by the U.S. EPA, cylinders, cans, glass, plastic, fiber boxes, tanks, metal drum/parts, and open metal containers were identified as usual container types. For each container type, the expected fractional release en route was calculated. The study concluded that the release rate for tank trucks is much lower than for any other container type (Los Angeles County, 1988).

The accident rates developed based on transportation in California were used to predict the accident rate associated with trucks transporting NW-200 to CCF. An average truck accident rate of 0.28 accident per million miles traveled equates to one truck accident for every 3.6 million miles traveled (Los Angeles County Hazardous Waste Management Plan, 1988). Based on an average of 15 truck trips per year traveling 400 miles per trip on California roadways, the

estimated accident rate associated with transporting NW-200 to CCF may result in one accident every 600 years.

**TABLE 2-7
TRUCK ACCIDENT RATES FOR CARGO ON HIGHWAYS**

Highway Type	Accidents Per 1,000,000 miles
Interstate	0.13
U.S. and State Highways	0.45
Urban Roadways	0.73
Composite (Average number for transport on interstates, highways, and urban roadways)	0.28

Source: U.S. Environmental Protection Agency, 1984.

The actual occurrence of an accidental release of a hazardous material cannot be predicted. The location of an accident or whether sensitive populations would be present in the immediate vicinity also cannot be identified. In general, the shortest and most direct route that takes the least amount of time would have the least risk of an accident. Hazardous material transporters do not routinely avoid populated areas along their routes, although they generally use approved truck routes that take population densities and sensitive populations into account.

The hazards associated with the transport of regulated (CCR Title 19, Division 2, Chapter 4.5 or the CalARP requirements) hazardous materials, including NW-200, could include the potential exposure of individuals in the event of an accident that would lead to a spill. A route map for the transport of NW-200 from Stockton to CCF is shown on Figure 2-1. The route for NW-200 to reach CCF is as follows:

- Interstate 5 South from Stockton to Southern California
- Interstate 210 East toward Pasadena
- Interstate 605 South toward El Monte
- Interstate 10 East toward Ontario
- Interstate 15 North toward Fontana
- Foothill Boulevard East (2.5 miles)
- Cherry Avenue South (0.5 miles)
- Arrow Boulevard East (1.0 mile)
- Sultana Avenue North to Facility (0.25 miles)

The above describe truck route limits the travel to Interstate freeways and local commercial roads. At no time does the route pass through residential areas or school zones.

In the unlikely event that the tanker truck would rupture and release the entire 5,500 gallons of NW-200, the solution would have to pool and spread out over a flat surface in order to create sufficient evaporation of ammonia (NH₃) from the NW-200 to produce a significant vapor cloud. For a road accident, the roads are usually graded and channeled to prevent water accumulation and a spill would be channeled to a low spot or drainage system, which would limit the surface area of the spill and the subsequent toxic emissions. Additionally, the roadside surfaces may not be paved and may absorb some of the spill. Without this pooling effect on an impervious surface, the spilled ammonia would not evaporate into a toxic cloud and impact residences or other sensitive receptors in the area of the spill. To avoid roadways that are not channeled, the designated transportation route will consist of the Interstate freeway system and arterial roadways through areas zoned for industrial activities. By increasing the quantity of NW-200 transported in each shipment, fewer trips will be required from the point of origin to CCF. The secondary containment within the proposed tanker truck type transport is likely to release less NW-200 than would happen if an accident were to occur under existing transport conditions without secondary containment. The reduced number to trips also reduces the risk of a tanker truck rupture.

Based on the improbability of an NW-200 tanker truck accident with a major release, its potential severity if it did occur, the conclusion of this analysis is that potential impacts due to accidental release of ammonia during transportation are less than significant.

c) No existing or proposed schools are located within one-quarter mile of the existing Facility, so that no significant adverse impacts are expected to a school. No schools are located in the immediate vicinity of the transport route as part of the proposed facility.

d) The proposed project is not located on a site which is included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; therefore, no significant hazards related to hazardous materials at the site on the environment or to the public are expected.

e) and f) The proposed project site is not within an airport land use plan or within about five miles of a public or private airport. Therefore, no safety hazards are expected from the proposed project on any airports in the region.

g) The proposed project is not expected to interfere with an emergency response plan or emergency evacuation plan. The proposed project is not expected to alter the route that employees would take to evacuate CCF. The proposed project is not expected to impact any emergency response plans. CCF has on file with the San Bernardino County Fire Department a Business Emergency Response Plan. Upon approval of this proposed project, this Business Emergency Response Plan will be updated.

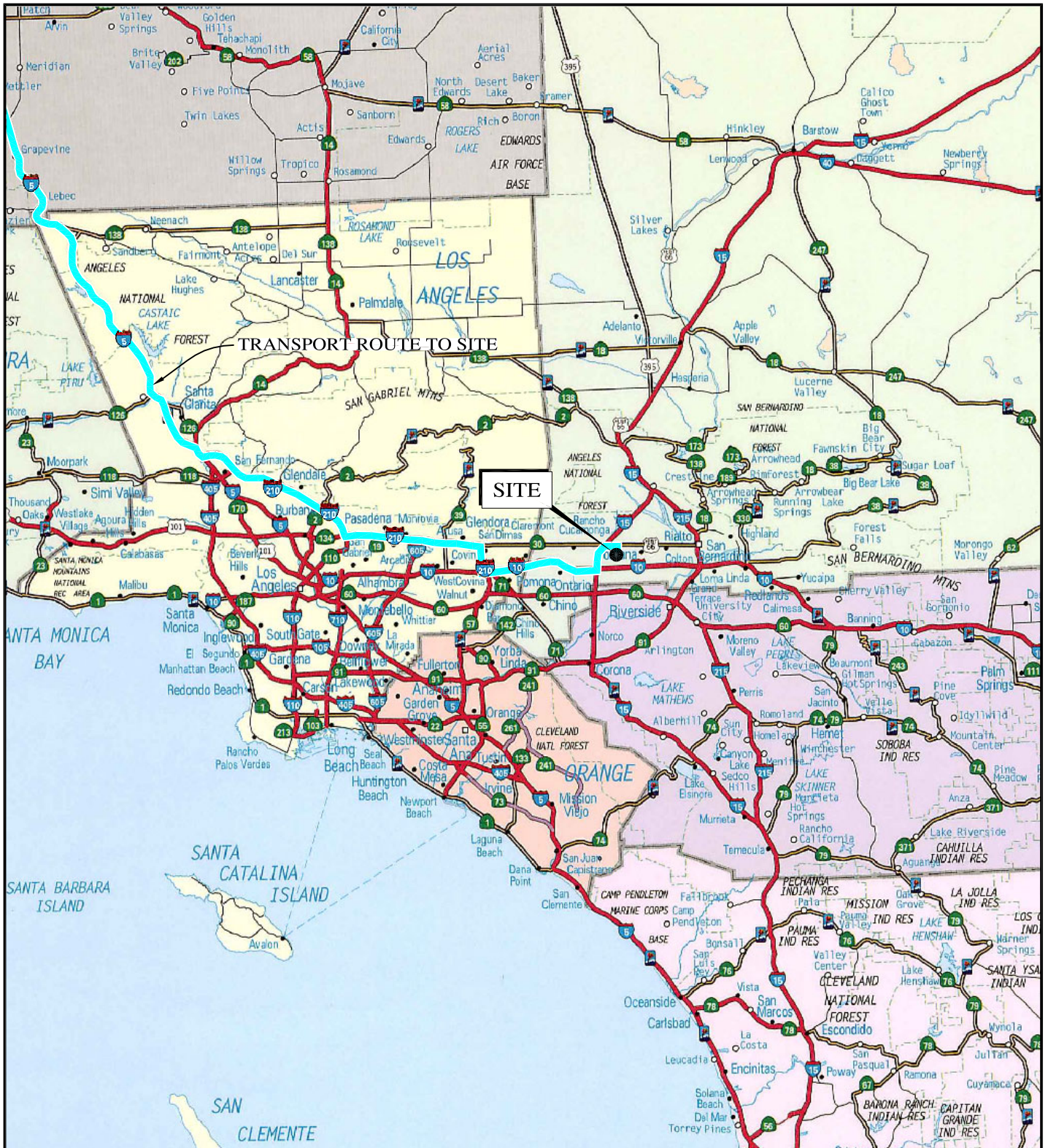
h) and i) The proposed project will not increase the existing risk of fire hazards in areas with flammable brush, grass, or trees because it will not increase the use of flammable materials at the site. No substantial or native vegetation exists within the operational portions of CCF. Additionally, no substantial or native vegetation is located within the immediate vicinity of CCF

since this area is a long developed industrial area. Therefore, no significant increase in fire hazards is expected at CCF associated with the proposed project.

8.3 Mitigation Measures

No mitigation is required since no significant adverse hazard impacts have been identified.

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BASE MAP SOURCE: THOMAS BROTHERS



NW-200 TRANSPORT ROUTE MAP
CALIFORNIA CASCADE FONTANA
FONTANA, CALIFORNIA

PROJECT NO.: 5827.5.001.01

DATE: APRIL 2006

DRAWN BY: DLB

CHECKED BY: BY

FIGURE NO.

2-1

	Potentially Significant Impact	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY			
Would the project:			
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | |
|--|--------------------------|--------------------------|-------------------------------------|
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j) Inundation by seiche, tsunami, or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| k) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| l) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| m) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| n) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| o) Require in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

9.1 Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

- The project will cause degradation or depletion of groundwater resources substantially affecting current or future uses.

- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.
- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use a substantial amount of potable water.
- The project increases demand for water by more than five million gallons per day.

9.2 Environmental Setting and Impacts

a), f), k), l) and o) CCF currently uses a permitted septic system for the management of human waste water. The existing CCF process wastewater is reused within the process and not discharged to the septic system. Only human wastewater is discharged through the septic system. The proposed project will not require additional employees. Therefore, no increased quantity of process waste water or septic waste is anticipated. As a result, no significant adverse impacts associated with waste water discharges are expected and no existing wastewater permits will need to be modified.

b) and n) Water is primarily provided by Fontana Water Company. Since the process changes to CCF are not expected to increase CCF demand of water, no adverse impacts on water demand are expected.

c), d), e) and m) The stormwater drainage from CCF currently exits the site at the southwest corner. Because the proposed project does not require any site preparation, grading, or construction of new structures, the proposed project is not projected to alter the stormwater runoff quantity or quality from CCF. No modifications to the Stormwater Pollution Prevention Plan are anticipated. No new storm drainage facilities or expansion of existing storm facilities are expected to be required. Since stormwater discharge or runoff is not expected to change in either volume or water quality, no significant stormwater quality impacts are expected to result from the operation of the proposed project.

g), h), i) and j) Based on the topography and/or site elevations in relation to the ocean, CCF is not expected to result in an increased risk of flood, seiche, tsunami or mud flow hazards. CCF would not locate housing within a 100-year flood hazard area. CCF is not located within a 100-

year flood hazard zone and no new expansion of CCF is planned. Therefore, no significant impacts associated with flooding are expected.

9.3 Mitigation Measures

No significant adverse impacts to water quality and supply are expected as a result of the activities associated with the proposed project. Therefore, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING			
Would the project:			
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10.1 Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by the San Bernardino County.

10.2 Environmental Setting and Impacts

a), b), and c) The proposed project occurs within the existing CCF property boundaries. Land use on CCF property is designated as IR, which is industrial regular zoning. The proposed project is consistent with the land use designation of industrial regular.

No new property will be acquired for CCF and there will be no impacts to established communities. Additionally, the proposed project is not expected to conflict with local habitat conservation plans, or natural community conservation plans, as CCF is located entirely within a previously developed industrial facility. The proposed project will not trigger changes in the current zoning designations at CCF. Based on these considerations, no significant adverse impacts to established residential or natural communities are expected.

Land use at CCF, and in the surrounding vicinity is consistent with the San Bernardino County General Plan land use designations. Therefore, no significant adverse impacts on land use are expected.

10.3 Mitigation Measures

No significant adverse impacts to land use are expected to occur as a result of construction or operation of the proposed project. Therefore, no mitigation is necessary or proposed.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES			
Would the project:			
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

11.1 Significance Criteria

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

11.2 Environmental Setting and Impacts

a) As the proposed project will be limited to the confines of the existing CCF boundaries, no loss of availability of known mineral resource that would be of value to the region or the residents of the state is expected. No mineral extraction is planned as part of the proposed project.

b) The proposed project is not expected to result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

11.3 Mitigation Measures

No significant adverse impacts to mineral resources are expected to occur as a result of the proposed project so no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XII. NOISE			
Would the project result in:			
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

12.1 Significance Criteria

Impacts on noise will be considered significant if:

- Construction noise levels exceed the City of Fontana noise ordinance or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

12.2 Environmental Setting and Impacts

a), b) c) and d) CCF is occupied by and surrounded by other industrial land uses. No construction activity or other structural modifications to CCF are planned. Workers exposed to noise sources in excess of 85 dBA are required to participate in a hearing conservation program. Workers exposed to noise sources in excess of 90 dBA for an eight-hour period will be required to wear hearing protection devices that conform to Occupational Safety and Health Administration/National Institute for Occupational Safety and Health (NIOSH) standards. Since the maximum noise levels from the operation of the equipment within CCF are expected to be 85 decibels or less, no significant impacts to workers during construction activities are expected.

e) and f) CCF is not located within an airport land use plan or within the vicinity of a private airstrip. Further, CCF is not located within the normal flight pattern of an airport. CCF is a currently operating industrial site with no structural modifications planned. Thus, the proposed project would not increase the noise levels to people residing or working in the area.

12.3 Mitigation Measures

No significant adverse noise impacts are expected to occur as a result of the proposed project within CCF. Therefore, no mitigation is necessary or proposed.

Potentially Significant Impact	Less Than Significant Impact	No Impact
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XIII. POPULATION AND HOUSING

Would the project:

- | | | | |
|---|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|

- | | | | |
|---|--------------------------|--------------------------|-------------------------------------|
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

13.1 Significance Criteria

The impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

13.2 Environmental Setting and Impacts

a), b) and c) The proposed changes of chemical usage at CCF will not involve an increase, decrease or relocation of population. The proposed project will not have any anticipated labor requirements. Operation of CCF with the proposed project is not expected to require any new permanent employees at CCF. Therefore, proposed project and operation of CCF are not expected to have significant adverse impacts on population or housing, induce substantial population growth, or exceed the growth projections contained in any adopted plans. The permits being processed as part of this proposed project are not anticipated to require a vapor recovery system or Best Available Control Technology (BACT). However, if BACT is required, off the shelf hardware can be used similar to a carbon absorber that can be installed on existing equipment. The installation of this BACT would be done with existing staff and would not require construction.

13.3 Mitigation Measures

No mitigation measures are required for the construction/operation of the project since no significant adverse impacts to population and housing are expected.

Potentially Significant Impact **Less Than Significant Impact** **No Impact**

XIV. PUBLIC SERVICES

Would the project:

Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

- | | | | |
|-----------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

14.1 Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

14.2 Environmental Setting and Impacts

a) CCF, already in place, is proposing only process modifications as part of the proposed project. CCF is currently serviced by the San Bernardino County Fire Department. No additional facilities or industrial developments are being proposed. The proposed project is not expected to cause significant impacts to the existing fire protection facilities.

b) The City of Fontana Police Department is the responding agency for law enforcement needs at CCF. The operation of the proposed project will not require additional workers. The proposed project will occur within the confines of the existing Facility. Therefore, no impacts to the local police department are expected related to the proposed project.

c), d) and e) No increase in the number of permanent workers is expected at CCF, therefore, there will be no increase in the local population and thus no impacts are expected to schools, parks, or other public facilities.

14.3 Mitigation Measures

Because no significant adverse impacts to public services are expected as a result of the proposed project, no mitigation is necessary or proposed.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XV. RECREATION			
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of CCF would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

15.1 Significance Criteria

The impacts to recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

15.2 Environmental Setting and Impacts

a) and b) The proposed project will not require new construction and would produce no significant changes in population densities since there are no future changes in workforce requirements for CCF. Additionally, the proposed project will not require additional workers. Thus, there will be no increase in the use of existing neighborhood and regional parks or other recreational facilities. The project does not include recreational facilities or require the construction or expansion of existing recreational facilities. No significant adverse impacts to recreational facilities are expected.

15.3 Mitigation Measures

No significant adverse impacts to recreational resources are expected to occur as a result of implementing the proposed project. Therefore, no mitigation is necessary or proposed.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVI. SOLID/HAZARDOUS WASTE			
Would the project:			
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

16.1 Significance Criteria

The proposed project impacts on solid/hazardous waste will be considered significant if the following occur:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

16.2 Environmental Setting and Impacts

a) No new construction activities are planned within CCF. During operation of CCF and the proposed project, there is not expected to be an increase in the amount of solid waste generated, which are primarily generated from administrative or office activities. The proposed project is not expected to result in an increase in permanent employees at CCF, so no significant increase in solid waste is expected.

b) There are no hazardous waste disposal sites within the southern California area. Hazardous waste generated at CCF currently amounts to approximately ten 55-gallon metal drums per year on average. No increases in hazardous wastes are expected as a result of the proposed project. Hazardous waste would need to be disposed of at a hazardous waste disposal facility (either in-state or out-of-state). Two such facilities are the Chemical Waste Management Inc. (CWMI) Kettleman Hills facility in King's County, and the Safety-Kleen facility in Buttonwillow (Kern County). Kettleman Hills has an estimated 6.5 million cubic yard capacity and expects to continue receiving wastes for approximately 18 years under its current permit, or for approximately another 24 years with an approved permit modification. Buttonwillow receives

approximately 960 tons of hazardous waste per day and has a remaining capacity of approximately 10.3 million tons. The expected life of the Buttonwillow Landfill is approximately 35 years.

Hazardous waste also can be transported to permitted facilities outside of California. The nearest out-of-state landfills are U.S. Ecology, Inc., located in Beatty, Nevada; USPCI, Inc., in Murray, Utah; and Envirosafe Services of Idaho, Inc., in Mountain Home, Idaho. Incineration is provided at the following out-of-state facilities: Aptus, located in Aragonite, Utah and Coffeyville, Kansas; Rollins Environmental Services, Inc., located in Deer Park, Texas and Baton Rouge, Louisiana; Chemical Waste Management, Inc., in Port Arthur, Texas; and Waste Research & Reclamation Co., Eau Claire, Wisconsin.

Hazardous wastes produced by CCF have historically been transported for disposal at several different locations. The proposed project is not expected to increase the quantity of hazardous waste generated within CCF. Since the total amount of hazardous waste generated from CCF is approximately 550 gallons per year, the drums are stored within the secondary containment area of CCF and collected on average of once per year for disposal. Therefore, no significant impacts to hazardous waste disposal facilities are expected due to the proposed project. CCF is expected to continue to comply with federal, state, and local statutes and regulations related to solid and hazardous wastes.

The permits being processed as part of this proposed project are not anticipated to require a vapor recovery system or Best Available Control Technology (BACT). However, if BACT is required, off the shelf hardware can be used similar to a carbon absorber that can be installed on existing equipment. Carbon absorber type of BACT have a typically long lifetime limiting the amount of carbon waste generated. The installation of this BACT would be done with existing staff and would not require construction. If the BACT filtration system cannot be recycled in California, disposal will take place as described above.

16.3 Mitigation Measures

No significant adverse impacts from waste generated or disposed of are expected and thus no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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XVII. TRANSPORTATION/TRAFFIC

Would the project:

- | | | | |
|--|--------------------------|--------------------------|-------------------------------------|
| a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|

volume to capacity ratio on roads, or congestion at intersections)?

- | | | | |
|--|--------------------------|--------------------------|-------------------------------------|
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Result in inadequate emergency access or access to nearby uses? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Result in inadequate parking capacity? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

17.1 Significance Criteria

The impacts on transportation/traffic will be considered significant if any of the following criteria apply:

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D or F for more than one month.
- An intersection’s volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.
- A major roadway is closed to all through traffic, and no alternate route is available.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.

- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.

17.2 Environmental Setting and Impacts

CCF is located at 8395 Sultana Avenue, approximately 2.5 miles southeast of the intersection of Interstate 15 and Highway 210 in the Fontana area of San Bernardino County, California. Raw materials and chemicals currently delivered to CCF are routed through hazardous materials transportation routes and through areas designated as industrial within the local land use plan.

a) and b) The proposed project will produce no anticipated increase in worker transportation since there will be no new construction. The proposed project is expected to reduce the number of trucks entering and leaving CCF by approximately 28 CCF truck entries per year. This would be accomplished by initiating the bulk transport and storage of NW-200 and Carbo-NT. As a result, the proposed project will slightly reduce the volume-to-capacity ratio of nearby intersections, thus providing a slight improvement in the level-of-service at affected intersections.

c) The proposed project will take place within the boundaries of the existing Facility. The project will not involve the delivery of materials via air so no increase in air traffic is expected.

d) and e) The proposed project does not include modifications to any roadways that could increase traffic hazards or create incompatible uses at or adjacent to the site. The proposed process modification will result in a reduction in traffic of about 28 truck trips per year. The trucks will access CCF using existing streets and access points. No new streets or entrances/exits to CCF are required. Emergency access at CCF will not be adversely affected by the proposed process modification and California Cascade will continue to maintain the existing emergency access gates.

f) No additional parking will be required as part of the process modifications to CCF. Parking for CCF is within the confines of the existing site. No increase in permanent workers is expected. Therefore, the proposed process modifications to CCF will not result in significant impacts on parking.

g) The proposed modification is to the process only and will end up with a reduced level of traffic in the vicinity of CCF. Therefore, these process modifications are not expected to conflict with adopted policies, plans, or programs supporting alternative transportation modes (e.g., bus turnouts, bicycle racks).

17.3 Mitigation Measures

No significant impacts to transportation/traffic are expected and thus mitigation measures are not required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE			
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) The proposed project does not have the potential to adversely affect the environment, reduce or eliminate any plant or animal species or destroy prehistoric records of the past. The proposed project is located at a site that is part of an existing industrial facility, which has been previously disturbed, graded and developed, and this project will not extend into environmentally sensitive areas but will remain within the confines of an existing, industrial facility.

b) and c) The proposed changes are not expected to result in significant adverse cumulative impacts, nor are expected to have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. Increased quantities of NW-200 transported to CCF are anticipated to have a less than one pound per day ammonia (NH₃) emission increase. Increases in the quantity of NW-200 allowed for transport to CCF will reduce the risk of a tanker truck accident and rupture. Therefore, since no project specific impacts were identified for any environmental topic areas, no impacts were considered to be cumulatively considerable as defined in CEQA Guidelines Section 15065(a)(3). Therefore, the proposed project is not expected to generate significant adverse cumulative impacts in any environmental topic area.

Lonza

Ms. Teri Muchow
Regulatory Specialist
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Buffalo, NY 14209

Lonza Inc
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Fair Lawn, NJ 07410, USA

Terri Romeo
Director/ Marketing & Technology
Wood Business

Tel 201 794 2721
Fax 201 794 2515
terri.romeo@Lonza.com

September 17, 2004

Dear Teri:

In response to your inquiry regarding free ammonia in Carboquat®, this will confirm that Lonza does not use ammonia in the production of Carboquat 250T. Furthermore, the Carboquat production process is designed to reduce trace impurities such as ammonia.

In addition, due to the known presence of free amine in the Carboquat 250T product, Lonza's analytical testing capabilities are not able to reliably distinguish between amine and ammonia.

Should you have any additional questions, please contact me.

Very truly yours,
Lonza Inc.



Terri Romeo



September 20, 2004

To Whom it May Concern:

Osmose, Inc. has an EPA Supplemental Registration of Distributor from Lonza, Inc. which allows Osmose, Inc. to distribute Lonza's Carboquat® under the name Carbo-NT.

Should you have any questions regarding this supplemental registration, please contact me.

Sincerely,



Teri Muchow
Regulatory Specialist

Osmose MATERIAL SAFETY DATA SHEET

MATERIAL SAFETY DATA SHEET: **NW 200-C**

SECTION I

MSDS NUMBER:	214-OSM
MSDS CODE:	OSM
SYNONYMS:	N/A
MANUFACTURED BY:	Osmose, Inc.
EPA REGISTRATION NUMBER:	3008-89
VENDOR:	N/A
EMERGENCY PHONE:	CHEMTREC: 1(800) 424-9300*
OTHER CALLS:	1(800) 686-6676
ADDRESS:	980 Ellicott Street, Buffalo NY 14209
MSDS PREPARED BY:	Teri Muchow
DATE PREPARED:	December 30, 2004
DATE LAST REVISED:	December 7, 2005 (replaces December 30, 2004)

*CHEMTREC'S EMERGENCY TELEPHONE NUMBER IS TO BE USED ONLY IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT INVOLVING CHEMICALS.

HAZARD SUMMARY

DANGER! CORROSIVE – May cause severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system.

- Eyes -** Corrosive to eyes. Severely irritating to the eyes and may cause eye burns. May cause permanent eye injury.
- Skin -** Corrosive to the skin. Severely irritating to the skin and may cause chemical burns to the skin. May cause allergic skin sensitization of susceptible persons.
- Ingestion -** May be harmful or fatal if swallowed. Ingesting may produce chemical burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.
- Inhalation -** Inhalation of vapors, mists or sprays can cause severe irritation or chemical burns of the nose, throat and lungs.

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

TRADE NAME: NW 200-C	CAS	OSHA PEL	ACGIH TLV	OTHER	%
INGREDIENT NAME					
Copper Ammonium Carbonate*	33113-08-5	1 mg/m3 – TWA	1 mg/m3 – TWA	Ammonium carbonate RQ 5000 lbs.	24.1%
<ul style="list-style-type: none"> Exposure limits for "Copper Dusts and Mists" Exposure limits for "Copper Fume" Exposure limits are for ammonia 		0.1 mg/m3 – TWA 35 mg/m3 STEL	0.2 mg/m3 - TWA 17 mg/m3 TWA 24 mg/m3 STEL		
Carbon Dioxide	124-38-9	5000 ppm	5000 ppm	N/A	> 1%
Water	7732-18-5	None	None	N/A	Approx. 75%

*Metallic copper equivalent 8%; Copper Oxide equivalent 10%; NH₃ equivalent 10%.

SECTION III - CHEMICAL CHARACTERISTICS

BOILING POINT	MELTING POINT	FREEZING POINT	SPECIFIC GRAVITY (H ₂ O = 1)	PERCENT VOLATILE BY VOLUME	THEORETICAL VOC CONTENT (PERCENT OF WEIGHT)
Not Established	Not Applicable	-5°C (23°F)	1.17 @ 25°C (77°F)	Not Available	Not Available
WEIGHT PER GALLON	pH:	VAPOR PRESSURE	VAPOR DENSITY	DENSITY	EVAPORATION RATE BASIS (N-BUAC) = 1
9.75 lbs./gal.	9.82	16.8 torr @ 68°F	Not Available	See specific gravity.	Similar to Water
SOLUBILITY IN WATER: Complete			REACTIVITY IN WATER: N/A		
APPEARANCE AND ODOR: A dark blue, aqueous liquid with an ammonia odor.					

Osmose MATERIAL SAFETY DATA SHEET

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	METHOD	FLAMMABLE LIMITS IN AIR (%)	AUTOIGNITION TEMPERATURE
Not Applicable	Not Applicable	Not Applicable	Not Applicable
NFPA CODES			
HEALTH	3	HMIS CODES:	
FLAMMABILITY	0	HEALTH	3
REACTIVITY	0	FLAMMABILITY	0
OTHER	N/A	REACTIVITY	0
EXTINGUISHER MEDIA:		Use methods for surrounding fire.	*goggles/face shield, gloves, protective clothing

SPECIAL FIRE FIGHTING PROCEDURES: This product is not flammable. Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Chemical resistant clothing may be necessary. Move fire-exposed containers if it can be done without risk to firefighters. If possible, firefighters should control run-off water to prevent environmental contamination. Decontaminate equipment with soapy water before returning to service.

UNUSUAL FIRE AND EXPLOSION HAZARDS: This product is corrosive, and presents a contact hazard to firefighters. When involved in a fire, this material may decompose and produce copper compounds, ammonia, and nitrogen oxides.

SECTION V - REACTIVITY DATA

IS THIS CHEMICAL STABLE UNDER NORMAL CONDITIONS OF HANDLING/STORAGE (Y/N)? Y

CONDITIONS TO AVOID (REGARDING STABILITY): Avoid extreme heat and contact with incompatible materials.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Copper compounds, ammonia, and nitrogen oxides.

HAZARDOUS POLYMERIZATION POSSIBLE (Y/N)? N

CONDITIONS TO AVOID (REGARDING POLYMERIZATION): N/A

SECTION VI - HEALTH HAZARDS

EMERGENCY OVERVIEW: This product is a dark blue, corrosive liquid with an ammonia odor. The primary health hazard associated with overexposure to this product is moderate to severe irritation of skin, eyes, or other contaminated tissues. Burns may occur if contact is prolonged or concentrated. This product is not flammable or reactive. Emergency responders must wear personal protective equipment appropriate for the situation to which they are responding.

ROUTES OF ENTRY: Main routes of overexposure for this product would be via inhalation of mists or sprays of this product, as well as contact with skin or eyes.

SIGNS AND SYMPTOMS OF ACUTE OVEREXPOSURE:

EYES	Depending on the duration of overexposure, contact with the eyes will cause irritation, pain, reddening, and may result in blindness.
SKIN:	Depending on the duration of skin contact, skin overexposures will cause reddening, discomfort, irritation, ulceration, and chemical burns. Repeated overexposure may lead to dermatitis (inflamed, dry skin).
INGESTION:	Ingestion is not anticipated to a significant route of overexposure for this solution. If this product is swallowed, irritation and burns of the mouth, throat, esophagus, and other tissues of the digestive system will occur immediately upon contact. Symptoms of such overexposure may include drowsiness, confusion, difficulty swallowing, burning sensation in the esophagus and stomach, intense thirst, nausea, abdominal pain, vomiting, diarrhea, stomach perforation, bloody stools or urine, convulsions, and collapse. Ingestion of large volumes of this product may be fatal.
INHALATION:	This solution is corrosive; if vapors, mists, or sprays of this product are inhaled, moderate to severe irritation or burns to the nose, throat, and lungs may occur, depending on duration and concentration of exposure. Additional inhalation symptoms may include coughing and difficulty breathing. Severe inhalation overexposures can lead to chemical pneumonitis, pulmonary edema, and death. Repeated low-level inhalation of mists or sprays may result in bronchitis or other adverse respiratory conditions.

CHRONIC OVEREXPOSURE: Repeated contact with this material may produce dermatitis and chapping. Repeated low-level inhalation of mists or sprays may result in bronchitis or other adverse respiratory conditions.

CHEMICAL LISTED AS A CARCINOGEN OR POTENTIAL CARCINOGEN?:

- NATIONAL TOXICOLOGY PROGRAM (Y/N): N
- IARC MONOGRAPHS (Y/N): N
- OSHA (Y/N): N

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Pre-existing dermatitis, other skin disorders, and respiratory diseases may be aggravated by overexposure to this product.

ACUTE AND CHRONIC TOXICITY:

No information is available for this specific formulation, but is available on its components.

Osmose MATERIAL SAFETY DATA SHEET

Exposure to Ammonia liquid or high concentrations of vapor can cause immediate and permanent damage to the eyes, skin, and respiratory and digestive tracts, and may be fatal. Respiratory effects may be delayed and include asthma-like bronchitis, pulmonary edema, laryngeal edema and glottis spasms creating a feeling of suffocation, and pneumonitis.

The Copper complex expressed as copper oxide in this product contains copper salts which, upon ingestion of high oral doses, can cause gastrointestinal disturbances, anemia, and secondary liver and kidney damage.

Copper complex (expressed as Copper oxides)
Oral LD50 Rat: 1350 mg/kg Inhalation LC50 Rat: 2000 ppm/4H Inhalation LC50 Mouse: 4230 ppm/1 H (related to Ammonia) Dusts as mists as Cu: 100 mg/m3 IDLH (related to copper)



EMERGENCY AND FIRST AID PROCEDURES



EMERGENCY PHONE NUMBER OF MANUFACTURER: CHEMTREC 1(800) 424-9300

- 1. INHALATION:** If inhaled, immediately remove the affected person to fresh air. If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek immediate medical attention. Perform mouth-to-mouth resuscitation if victim is not breathing.
 - 2. EYE CONTACT:** If this product enters the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Flush eyes with plenty of water for at least 15 minutes. Seek immediate medical attention.
 - 3. SKIN CONTACT:** For skin contact, wash immediately with soap and water. Continue flushing skin with water for 15 minutes. Immediately take off all contaminated clothing. Seek immediate medical attention.
 - 4. INGESTION:** If the material is swallowed, get medical attention or advice. DO NOT induce vomiting without first seeking professional advice. Have victim rinse mouth with water, if conscious. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow.
- NOTES TO PHYSICIAN:** Treat symptoms and eliminate overexposure. Be observant for signs of pulmonary edema in the event of severe inhalation overexposures.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

UNITED STATES DEPARTMENT OF TRANSPORTATION SHIPPING DESCRIPTION:

Corrosive liquids, n.o.s., 8, UN1760, PGII (Copper Ammonium Carbonate, Ammonium Hydroxide)

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: All employees who handle this material should be trained to handle it safely. Avoid breathing vapors or mists generated by this product. Use in a well-ventilated location. Open containers slowly, on a stable surface. Containers of this product must be properly labeled. Empty containers may contain residual liquid or vapors, therefore empty containers should be handled with care. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials. Material should be stored in secondary containers, or in a diked area, as appropriate. Keep container tightly closed when not in use. Floors should be sealed to prevent absorption of this material. If appropriate, post warning signs in storage and use areas. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. If this product is transferred into another container, only use portable containers and dispensing equipment (faucet, pump, drip can) approved for corrosive, basic liquids. Transfer material into properly labeled containers. Periodically inspect tanks and other containers of this product for leaks or damage. Ensure that dikes and berms surrounding tanks of this product are in good condition. Empty tanks, containers, pipelines, or process equipment may contain residual liquid; therefore, they must be handled with care.

OTHER PRECAUTIONS: During maintenance of contaminated equipment, make certain that application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is provided. Decontaminate equipment before maintenance begins. Do not get preservatives in your eyes, on your skin, or on your clothing. Do not inhale vapors or mists of this product. Use this product with adequate ventilation. All work practices should minimize the generation of splashes and aerosols. **Remove contaminated clothing immediately and disposed of properly. Do not re-use contaminated clothing.** Wash hands thoroughly after handling product. Keep out of reach of children. Read product label. Review Section VI of this MSDS for Emergency and First Aid Procedures.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Containment Procedures:	Stop the flow of material, if this is without risk. Wear appropriate protective equipment and clothing during clean-up. Keep upwind and out of low areas. Contain discharge by booming on water or diking on ground. Absorb/adsorb residual materials and clean-up with non-sparking tools. Prevent entry into sewers, drains, underground or confined spaces, water intakes and waterways. See product label for more information.
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Osmose MATERIAL SAFETY DATA SHEET

Clean-Up Procedures:	Absorb spill with inert material. Shovel material into appropriate container for disposal. Sweep up or gather material and place in appropriate container for disposal. Wash spill area thoroughly. Wear appropriate protective equipment during clean-up. See product label for more information.
Evacuation Procedures:	Isolate area. Keep unnecessary personnel away.
Special Procedures:	Wear appropriate personal protective equipment. Follow all Local, State and Federal Regulations for disposal.

WASTE DISPOSAL METHODS: You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous waste. Wastes of this product should be tested for D002 (Characteristic/Corrosivity). This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below exposure limits listed in Section 2. Individuals who enter pressure-treatment cylinders must wear properly fitting, well-maintained, high efficiency respirators, MSHA/NIOSH approved for ammonia. If the level of ammonia in the plant is unknown, or exceeds the short-term exposure limit (STEL) of 35 ppm, or the 8-hour time weighted average of 25 ppm recommended by ACGIH, air monitoring programs, procedures and record retention must be conducted in accordance with OSHA standards.

VENTILATION REQUIREMENTS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided in Section 2. Exhaust directly to the outside. Use local exhaust ventilation, and process enclosure if necessary, to control mist formation. Supply sufficient replacement air to make up for air removed by system.

PROTECTIVE GLOVES: Prevent skin contact. Wear chemical resistant (rubber, neoprene, or nitrile) gloves for routine industrial use. Use double gloves for spill response.

EYE PROTECTION: Prevent eye contact. Wear chemical splash goggles and a face shield when there is a potential for eye contact (splashes, sprays, mists). Use chemical splash goggles to protect the eyes for routine industrial use. They eye protection worn must compatible with respiratory protection system employed. Ensure eyewash/safety shower stations are available near areas where this product is used.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Prevent skin contact. Wear chemical resistant (i.e. rubber, nitrile, neoprene, Tyvek, etc.) body protection appropriate for task – apron or complete suit. Wear chemical resistant boots to protect the feet. Individuals who enter treatment cylinders and other related equipment contaminated with wood treatment solutions must wear protective clothing (including coveralls, jacket, gloves, and boots) impervious to wood treatment solutions.

WORK/HYGIENIC PRACTICES: Applicators must not eat or drink, or use tobacco products during those parts of the application process that may expose them to the wood treatment concentrate or solutions (i.e. ,manually opening/closing cylinder doors, moving trams out of the cylinder, mixing chemicals, handling freshly treated wood, etc.). Wash thoroughly after skin contact and before eating, drinking, using tobacco products, or using restrooms. Applicator must leave all protective clothing, work shoes or boots, and equipment at the treatment plant. **Remove contaminated clothing immediately and dispose of properly. Do not re-use contaminated clothing.**

SECTION IX – EXOLOGICAL INFORMATION

ECOTOXICITY: The components of this product are relatively stable under ambient, environmental conditions. Copper Ammonium Carbonate is a fungicide and bactericide, therefore plants contaminated with this product may be adversely affected or destroyed. Animals contaminated with this solution may be severely injured or killed. A release of this product in a river or other body of water (especially in large volumes) may kill fish and other aquatic life. For more specific environmental data, the effect of the material on plants or aquatic life, please contact Osmose, Inc. at the number listed in Section 1.

SECTION X - REGULATORY INFORMATION:

SECTION 302:

Copper Ammonium Carbonate is not an extremely hazardous substance.

SECTION 304:

Ammonium Carbonate has a reportable quantity of 5,000 pounds.

SECTION 311 & 312:

Storage of NW 200-C will subject you to reporting under Section 311 and 312 of SARA. Under Section 311 you are required to submit material safety data sheets to your Local Emergency Planning Committee (LEPC), your State Emergency Response Commission (SERC) and your local fire department. Under Section 312 you are required to submit a Tier I or II Inventory Form to your LEPC, SERC and local fire department by March 1st of each year if you exceed the Threshold Planning Quantity.

SARA/TITLE III: SECTION 312 - HAZARD CATEGORIES:

Immediate (Acute) Health: Yes Reactive Hazard: No
Delayed (Chronic) Health: Yes Sudden Release of Pressure: No
Fire Hazard: No

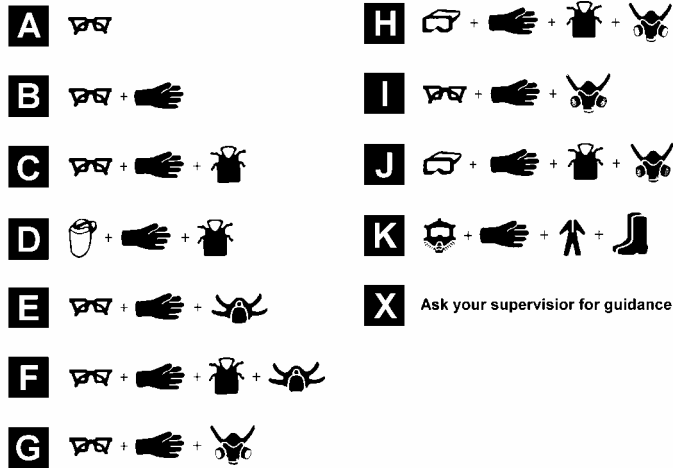
SECTION 313:

Form R reporting required for Copper Compounds, Chemical Category N100 (1.0% de minimis concentration)

Form R reporting required for 1.0% de minimis concentration (10% total aqueous ammonia); includes anhydrous ammonia and aqueous ammonia from water dissociable ammonium salts and other sources (related to Ammonia).

Osmose MATERIAL SAFETY DATA SHEET

HAZARDOUS MATERIALS INFORMATION SYSTEM (HMIS) PERSONAL PROTECTION INDEX



N/A = Not Applicable

NOTICE: The information herein is given in good faith but no warranty, expressed or implied, is made, and Osmose, Inc. expressly disclaims liability from reliance on such information. Information on this form is furnished for the purpose of compliance with the Occupational Safety and Health Act of 1970 and shall not be used for any other purpose. Use or dissemination of all or any part of this information for any other purpose may result in a violation of law or constitute grounds for legal action.

Osmose MATERIAL SAFETY DATA SHEET

MATERIAL SAFETY DATA SHEET: **Carbo-NT**

SECTION I

MSDS NUMBER:	186-osm
MSDS CODE:	OSM
SYNONYMS:	N/A
MANUFACTURED FOR:	Osmose, Inc.
EPA REGISTRATION NUMBER:	6836-304-3008
VENDOR:	N/A
EMERGENCY PHONE:	CHEMTREC: 1(800) 424-9300
OTHER CALLS:	716-882-5905
ADDRESS:	980 Ellicott Street, Buffalo NY 14209
MSDS PREPARED BY:	Teri Muchow
DATE PREPARED:	June 18, 2003
DATE LAST REVISED:	December 22, 2005 (replace July 28, 2004)

**CHEMTREC'S EMERGENCY TELEPHONE NUMBER IS TO BE USED ONLY IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT INVOLVING CHEMICALS.*

HAZARD SUMMARY

DANGER! CORROSIVE – May cause severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system.

Eyes - Corrosive to eyes. Severely irritating to the eyes and may cause eye burns. May cause permanent eye injury.

Skin - Corrosive to the skin. Severely irritating to the skin and may cause chemical burns to the skin.

Ingestion - May be harmful or fatal if swallowed. Ingesting may produce chemical burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

Inhalation - Inhalation of vapors, mists or sprays can cause severe irritation or chemical burns of the nose, throat and lungs.

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

TRADE NAME: Carbo-NT					
INGREDIENT NAME	CAS	OSHA PEL	ACGIH TLV	OTHER	%
Didecyl dimethyl ammonium carbonate and Didecyl dimethyl ammonium bicarbonate	Proprietary	None Established	None Established	N/A	50%
N-Dialkyl-N, N-dimethylamine	Proprietary	None Established	None Established	N/A	1%
Methanol	67-56-1	200 ppm TWA	200 ppm TLV 250 ppm STEL	RQ = 5000 pounds	3%
Propylene glycol	57-55-6	N/A	N/A	N/A	9%
Water	7732-18-5	None	None	N/A	36%

SECTION III - CHEMICAL CHARACTERISTICS

BOILING POINT	MELTING POINT	FREEZING POINT	SPECIFIC GRAVITY (H ₂ O = 1)	THEORETICAL VOC CONTENT (PERCENT OF WEIGHT)	
Not known	N/A	-10°C	0.96 @ 25°C	10.4% nominal, 14.4% maximum	
WEIGHT PER GALLON	pH:	VAPOR PRESSURE	VAPOR DENSITY	DENSITY	EVAPORATION RATE BASIS (N-BUAC) = 1
8.0 lbs/gal @ 77°F	9 - 11	Not Available	Not Known	See specific gravity.	Not Known
PERCENT VOLATILE (BY WEIGHT)	VISCOSITY	SOLUBILITY IN WATER	REACTIVITY IN WATER	APPEARANCE & ODOR	
49%	350 CPS@ 21°C	Soluble	N/A	Color may vary from amber to pale yellow liquid; slight amine odor.	

Osmose MATERIAL SAFETY DATA SHEET

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	METHOD	FLAMMABLE LIMITS IN AIR (%)	AUTOIGNITION TEMPERATURE	
> 200°F	Pensky-Martin	Not available	Not available	
NFPA CODES				
HEALTH	2	HMIS CODES:	HEALTH	2
FLAMMABILITY	1		FLAMMABILITY	1
REACTIVITY	0		REACTIVITY	0
OTHER	N/A		PROTECTION	D
EXTINGUISHER MEDIA: Alcohol foam, CO ₂ , dry chemical, water				

SPECIAL FIRE FIGHTING PROCEDURES: Must wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing. Cool fire-exposed containers with water spray.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Products of combustion are toxic.

SECTION V - REACTIVITY DATA

IS THIS CHEMICAL STABLE UNDER NORMAL CONDITIONS OF HANDLING/STORAGE (Y/N)? Y

CONDITIONS TO AVOID (REGARDING STABILITY): None Known

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing or reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce toxic vapors/fumes of amines and other organic materials, and oxides of carbon and nitrogen.

HAZARDOUS POLYMERIZATION POSSIBLE (Y/N)? N

CONDITIONS TO AVOID (REGARDING POLYMERIZATION): N/A

SECTION VI - HEALTH HAZARDS

EMERGENCY OVERVIEW: Corrosive. Causes irreversible eye damage and skin burns. May be fatal if swallowed or inhaled. Do not get in eyes, on skin or clothing. Do not breathe vapor. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Harmful if absorbed through the skin.

ROUTES OF ENTRY: Skin contact and eye contact.

SIGNS AND SYMPTOMS OF ACUTE OVEREXPOSURE: There is no information available on effects of overexposure. Based upon animal toxicity information available for this and closely related materials, the following effects can be anticipated:

EYES	Direct eye contact may produce severe irritation and/or chemical burns with possibly irreversible tissue damage.
SKIN:	Direct skin contact may produce severe irritation and/or chemical burns with possibly irreversible tissue damage.
INGESTION:	This product may be harmful or fatal if swallowed. Ingestion can cause immediate burning pain in the mouth, throat and abdomen with severe swelling of the larynx. Ingestion may cause skeletal muscle paralysis affecting the ability to breathe; circulatory shock; and/or convulsions.
INHALATION:	This product may be harmful by inhalation.

CHRONIC OVEREXPOSURE: None known

CHEMICAL LISTED AS A CARCINOGEN OR POTENTIAL CARCINOGEN?:

- NATIONAL TOXICOLOGY PROGRAM (Y/N): N
- IARC MONOGRAPHS (Y/N): N
- OSHA (Y/N): N

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known

ACUTE AND CHRONIC TOXICITY: The toxicology information provided below is for this material and closely related materials:

- Oral LD₅₀ (rat): 245 mg/kg
- Skin Irritation (rabbit): Corrosive
- Photosensitization (Guinea pig): Not a sensitizer or photoallergen

GENOTOXICITY/MUTAGENICITY: For N,N-Dialkyl-N, N-dimethylammonium chloride –

- Ames test (in vitro – Salmonella sp.): Not mutagenic.
- CHO/HGPRT Assay (in vitro – CHO cells): Not mutagenic.
- Unscheduled DNA Synthesis (in vitro – CHO cells): No increase in activity
- Chromosome Aberration (in vitro – CHO cells): Not clastogenic with or without metabolic activation.

REPRODUCTIVE TOXICITY INFORMATION: For N,N-Dialkyl-N, N-dimethylammonium chloride:

- two generation reproductive/developmental study (rat-oral): No evidence of reproductive or developmental toxicity effect was observed at exposure doses ranging from 10 – 50 mg/kg/day.
- Developmental (rabbit – oral): No evidence of developmental toxic effects was noted at exposure doses ranging from 10 – 50 mg/kg/day administered from day 6 through 15 of gestation.

Osmose MATERIAL SAFETY DATA SHEET



EMERGENCY AND FIRST AID PROCEDURES



EMERGENCY PHONE NUMBER OF MANUFACTURER: CHEMTREC 1(800) 424-9300

Chemically contaminated personnel must be taken for medical attention. Rescuers should be taken for medical attention if necessary. Take a copy of label and MSDS to physician or health-care professional with victim.

- 1. INHALATION:** If inhaled, remove from area to fresh air. Get immediate medical attention. If not breathing, clear airway and start artificial respiration. If victim is having trouble breathing, give supplemental oxygen, if available.
- 2. EYE CONTACT:** Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get immediate medical attention. If physician is not available, flush for additional 15 minutes and then transport victim to medical care.
- 3. SKIN CONTACT:** Wash with plenty of running water, and soap if available, for 15 minutes. Immediately remove contaminated clothing and shoes. Get immediate medical attention. For dermal overexposure, burn cream may help prevent irritation from blistering.
- 4. INGESTION:** Immediately give 3 – 4 glasses of milk (if unavailable, give water). DO NOT induce vomiting. If vomiting does occur, give fluids again. Get medical attention. Have physician determine if patient's condition allows for induction of vomiting or evacuation of the stomach. Do not give anything by mouth to a convulsing or unconscious person.

NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Preventive measures against circulatory shock should be followed, as well as, measures to support respiration including manually or mechanically, including providing oxygen, if needed.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

UNITED STATES DEPARTMENT OF TRANSPORTATION SHIPPING DESCRIPTION:

Corrosive liquid, n.o.s., 8, UN1760, PGIII (N, N-Dialkyl-N, N-dimethylammonium bicarbonate/carbonate)

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Maximum storage temperature is 140°F. Keep containers closed when not in use. Do not contaminate drinking water, food or feed by storage or disposal. **Remove contaminated clothing immediately and dispose of properly. Do not re-use contaminated clothing.**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Danger! Corrosive liquid! Wear appropriate protective equipment including gloves (rubber, neoprene or nitrile), and impervious shirt and pants (Tyvek). Where mists or vapors of unknown concentrations may be generated, use NIOSH approved respirator (self-contained breathing apparatus preferred). In the event of a spill or release, detergent (oil emulsifier) can be used to clean spill area. Dike and contain spill with inert material (sand, earth, etc.) and transfer the liquid and solid separately to containers for recovery or disposal. Keep spill out of sewers and open bodies of water.

WASTE DISPOSAL METHODS: Dispose of in compliance with all Federal, State and local laws and regulations. Incineration is the preferred method.

CONTAINER DISPOSAL: Empty containers retain product residues and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat or flame. They may explode and cause injury. Follow all MSDS precautions in handling empty containers. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION: In processes where mists or vapors may be generated, a NIOSH/MSHA jointly approved respirator is advised in the absence of proper environmental controls. Individuals who enter pressure treatment cylinders and other related equipment that are contaminated with the wood treatment solution (e.g., cylinders that are in operation or are not free of the treatment solution) must wear a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE prefilter. If this product is used in conjunction with a product that requires a higher level of respiratory protection, the more protective respirator must be worn.

VENTILATION REQUIREMENTS: In processes where mists or vapors may be generated, proper ventilation must be provided in accordance with good ventilation practices.

PROTECTIVE GLOVES: Prevent skin contact. Wear chemical resistant (rubber, neoprene or nitrile) gloves for routine industrial use. Use double gloves for spill response.

EYE PROTECTION: Prevent eye contact. Wear chemical splash goggles and a face shield when there is a potential for eye contact (splashes, sprays, mists). Use chemical splash goggles to protect the eyes for routine industrial use. The eye protection worn must be compatible with respiratory protection system employed. Ensure eyewash/safety shower stations are available near areas where this product is used.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Prevent skin contact. Wear chemical resistant (i.e. rubber, nitrile, neoprene, Tyvek, etc.) body protection appropriate for task – apron or complete suit. Wear chemical resistant boots to protect the feet. Individuals who enter treatment cylinders and other related equipment contaminated with wood treatment solutions must wear protective clothing (including coveralls, jacket, gloves, and boots) impervious to wood treatment solutions.

Osmose MATERIAL SAFETY DATA SHEET

WORK/HYGIENIC PRACTICES: As with all chemicals, avoid getting this solution on you or in you. Wash hands after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. **Remove contaminated clothing immediately and dispose of properly. Do not re-use contaminated clothing.** Use ventilation and other engineering controls to minimize exposure to mists or sprays of this product.

SECTION IX – EXOLOGICAL INFORMATION

AQUATIC ECOTOXICITY:

- LC₅₀ (rainbow trout – 96 hour – Static): 0.810 mg/l
- LC₅₀ (bluegill sunfish – 96 hour – Static/Renewal): 0.28 mg/l
- LC₅₀ (Sheepshead Minnow – 96 hour Static/Renewal): 1.110 mg/l
- EC₅₀ (Daphnia magna – 48 hour – Static): 0.073 mg/l
- LC₅₀ (mysid shrimp – 96 hour – static): 0.066 mg/l

SECTION X - REGULATORY INFORMATION:

SARA/TITLE III ;SECTION 312 - HAZARD CATEGORIES:

Immediate (Acute) Health: **Yes** Reactive Hazard: **No**
 Delayed (Chronic) Health: **No** Sudden Release of Pressure: **No**
 Fire Hazard: **Yes**

SECTION 302:

N/A

SECTION 304:

N/A

SECTION 311 & 312:

Storage of Carbo-NT will subject you to reporting under Section 311 and 312 of SARA. Under Section 311 you are required to submit material safety data sheets to your Local Emergency Planning Committee (LEPC), your State Emergency Response Commission (SERC) and your local fire department. Under Section 312 you are required to submit a Tier I or II Inventory Form to your LEPC, SERC and local fire department by March 1st of each year.

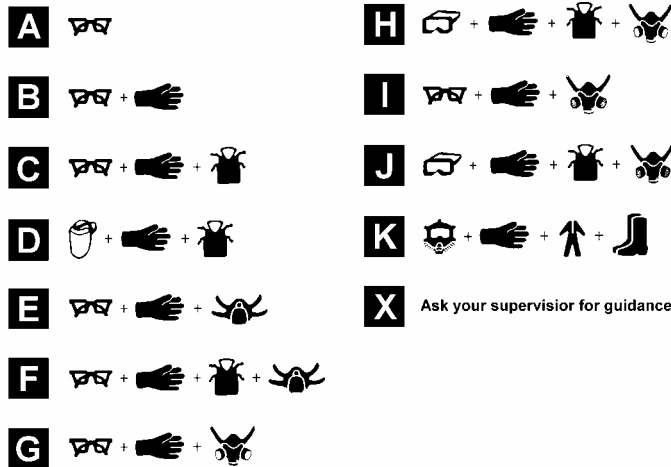
SECTION 313:

This portion of the act requires submission of annual reports of releases of the following components of this material if the threshold reporting quantities as listed in 40 CFR 372, are met or exceeded:

Methanol, CAS #67-56-1; Typical Maximum Concentration 3%.

CALIFORNIA PROPOSITION 65 – This product contains N-Nitrosodimethylamine (CAS #62-75-9) at 100 ppb. This chemical is known to the State of California to cause cancer.

HAZARDOUS MATERIALS INFORMATION SYSTEM (HMIS) PERSONAL PROTECTION INDEX



N/A = Not Applicable

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AIR DISPERSION MODELING STUDY

**WORST-CASE RELEASE SCENARIO
FOR STORAGE OF AMMONIACAL
COPPER SOLUTION**

AT THE
**CALIFORNIA CASCADE
FONTANA FACILITY**

PREPARED FOR THE
**CALIFORNIA CASCADE FONTANA
8395 SULTANA AVENUE
FONTANA, CALIFORNIA 92335**

SEPTEMBER 2003

PREPARED BY:

PARSONS

*DESIGN • RESEARCH • PLANNING
100 WEST WALNUT STREET, PASADENA, CALIFORNIA 91124*

R1440

**AIR DISPERSION MODELING STUDY
WORST-CASE RELEASE SCENARIO FOR STORAGE OF
AMMONIACAL COPPER SOLUTION**

CALIFORNIA CASCADE FONTANA FACILITY

INTRODUCTION

California Cascade Fontana Facility (CC Fontana Facility) pressure treats lumber for the retail sale. Their current process uses a copper, chromium and arsenic solution (CCA). The CC Fontana facility is located at 8395 Sultana Avenue, Fontana, California 92335. Figure 1 shows the facility location. By December 2003, CC Fontana facility will stop using CCA and start using an ammoniacal copper solution. The ammoniacal copper solution contains 8% copper and 10 to 11% ammonia solution. It is proposed to store approximately 10,000 gallons of ammoniacal solution in an above ground storage tank. Since the quantity of ammonia in the ammoniacal copper solution stored at the CC Fontana facility will exceed 500 pounds, the CC Fontana facility will be subject to the California Accidental Release Prevention (CalARP) Program Level Regulations (RMPR). The RMPR requires that an owner or operator of a stationary source which may handle, manufacture, use or store more than the threshold quantity of a regulated substance in a process (threshold quantity for ammonia is 500 pounds) shall prepare a Risk Management Plan (RMP) and comply with all the RMPR requirements on the date on which a regulated substance is first present above the threshold quantity in a process.

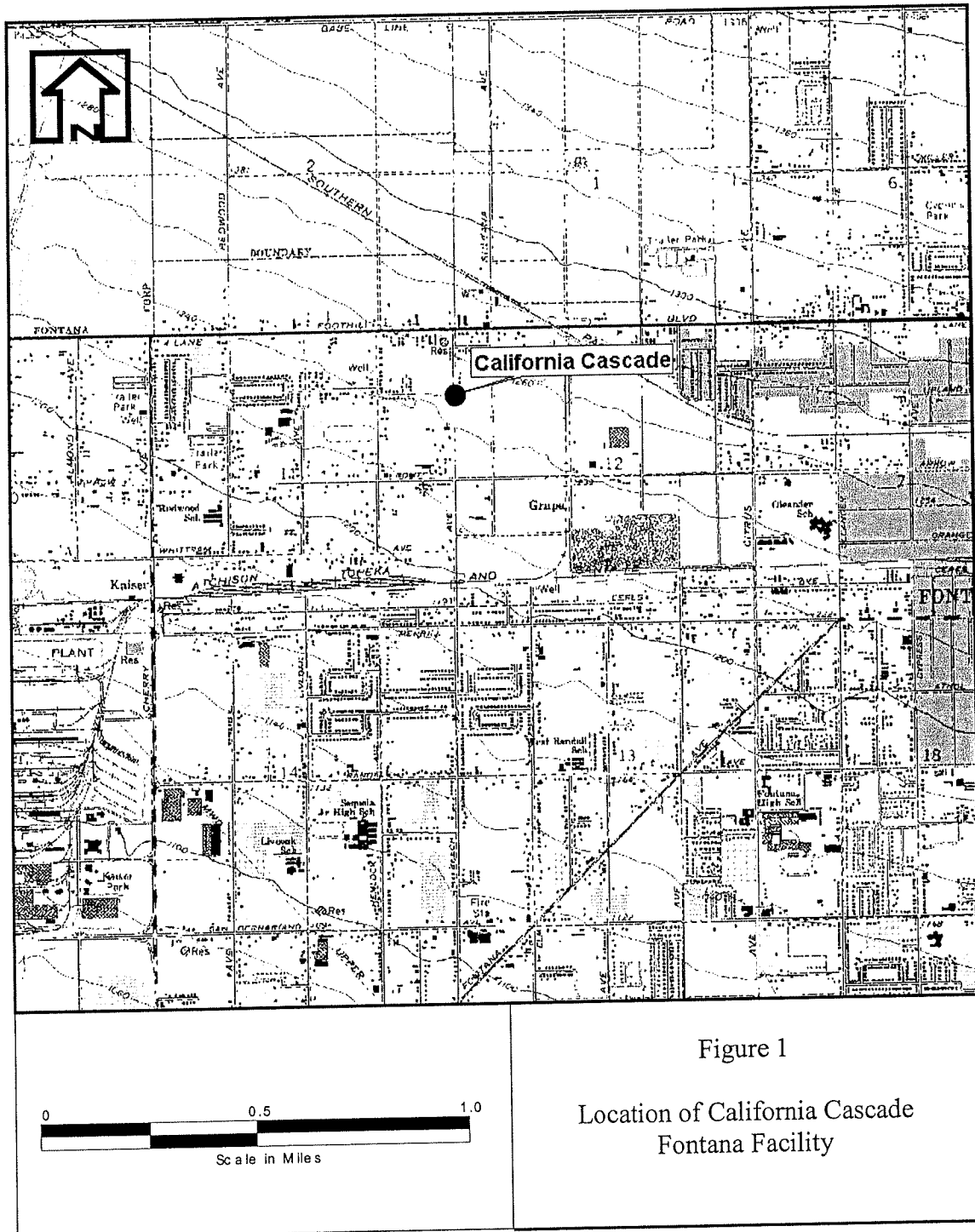
RMPR divides covered processes into three categories, thereby reducing the burden of compliance for certain low-risk sources by requiring such sources to implement less prescriptive risk management Program Levels. The eligibility criteria for three Program Levels are provided below:

Program Level 1: Processes with no public receptors within the distance to the endpoint from a worst-case release and no accidents with specific off-site consequences within the past five years are eligible for Program Level 1. The "worst-case release" is defined as the largest quantity of a regulated substance from a vessel or process line failure that results in the greatest distance to an endpoint.

Program Level 2: Processes not eligible for Program Level 1 or 3 are placed in Program Level 2.

Program Level 3: Processes not eligible for Program Level 1 and either subject to federal or California Occupational Health and Safety Administration (OSHA) Process Safety Management (PSM) Standard or in the specified North American Industrial Classification System (NAICS) Codes are placed in Program Level 3.

A dispersion modeling study was performed for the worst-case release scenario to determine the Program Level of the proposed ammoniacal copper solution process. The details of this air dispersion modeling study are presented below.



PROCESS DESCRIPTION

CC Fontana facility proposes to construct the 10,000-gallon ammoniacal copper solution storage tank on an elevated platform that will be over an existing spill containment dike that surrounds several above ground storage tanks. The 10,000-gallon tank will be approximately 8 feet in diameter and 28 feet in length. The tank will be completely enclosed in a steel vault that would serve as the primary spill containment system as spillage from a tank failure of the 10,000-gallon tank would be fully contained within the vault. In the event that the platform fails, spillage resulting from a failure of the primary containment system would be contained in the underlying spill containment dike. The steel vault will be fully closed and provided with a pressure and vacuum relief valve. Figure 2 shows a plot plan of the facility, including the nearest fence-line from the proposed tank, where public receptors may be present. As shown in Figure 2, the closest fence-line from the proposed ammoniacal tank where public receptors may be present is 100 feet.

The proposed tank will be filled from a tanker truck. The filling pipe that will connect the elevated 10,000-gallon tank to the filling connection will be of diameter 2-inch and length of 30 ft. It should be noted that the proposed tank will be filled from the top; thus, there will be no backflow of ammoniacal solution from the tank in case of a crack/rupture in the fill line.

WORST-CASE RELEASE SCENARIO ANALYSIS PARAMETERS

The worst-case release scenario analysis parameters used for this study are listed below.

Toxic Endpoint

The distance from the point of release to a location at which the regulated toxic substance concentration is equal to or greater than a specified concentration must be determined to define the vulnerability zone. That specified concentration is known as the toxic endpoint. As required by RMPR, the ammonia toxic endpoint used was 0.14 mg/L. This corresponds to a concentration of 200 parts per million by volume (ppm), and represents the American Industrial Hygiene Association (AIHA) Emergency Response Planning Guideline (ERPG-2), which is defined as "the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action."

Wind Speed/Atmospheric Stability Class

RMPR requires the use of a wind speed of 1.5 meters per second (m/s), and an atmospheric stability Class F in the offsite consequence analysis for the worst-case release scenario. Stability classes are categorized by the amount of turbulence in the atmosphere, and are typically divided into six classes (A through F), with F being the least turbulent and A the most turbulent. A typical Class A stability occurs on a sunny day and with high wind speeds, D on a cloudy day with active wind speeds, and F in

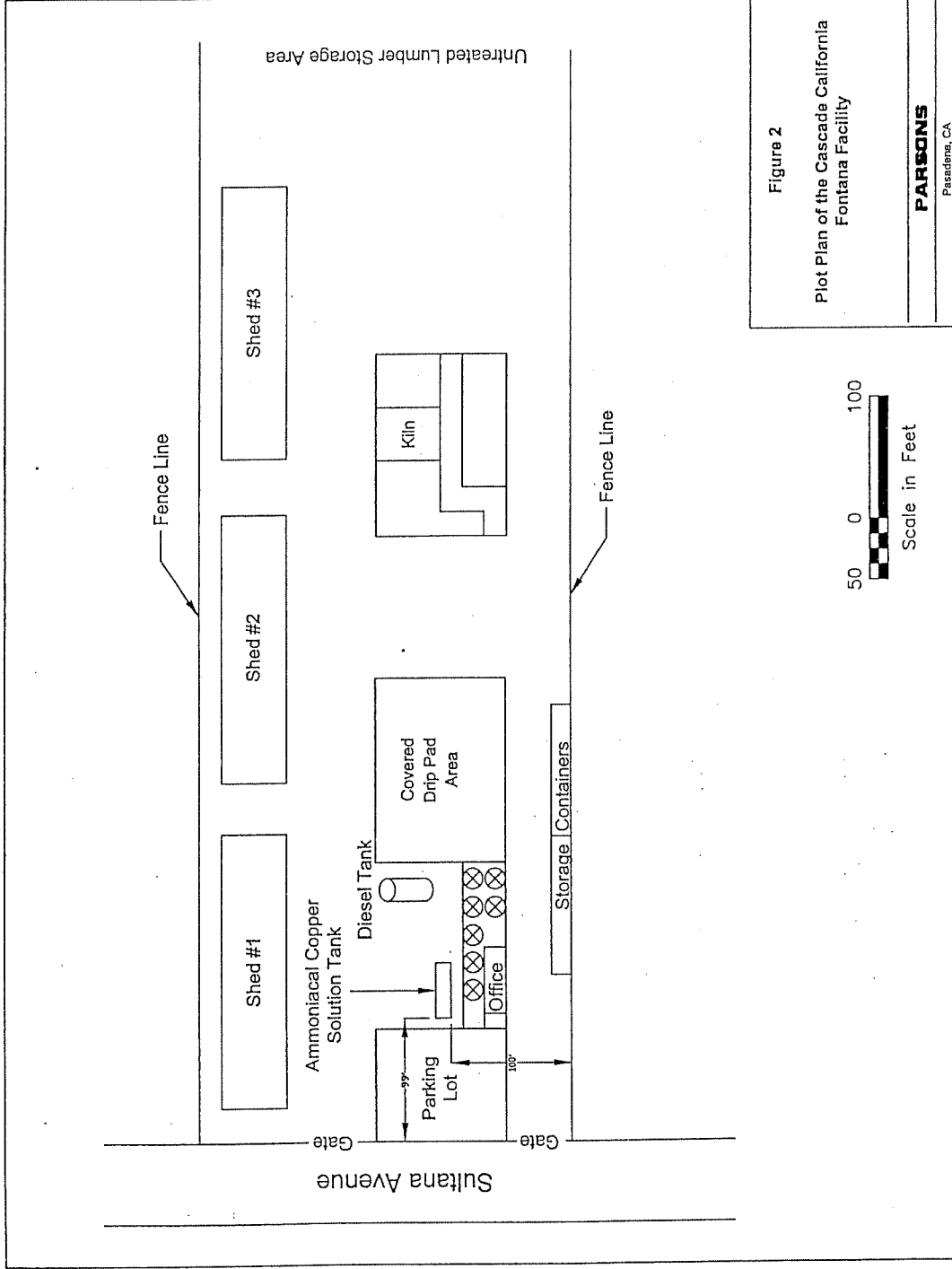


Figure 2
Plot Plan of the Cascade California
Fontana Facility

PARSONS
Pasadena, CA

evening with low wind speeds. With increased turbulence, or lower stability of the atmosphere, the plume is diluted more rapidly and the distance to the toxic endpoint is shorter. Therefore, stability Class F and a wind speed of 1.5 m/s were chosen for the worst-case scenario to represent the conditions that result in the least amount of regulated substance dilution and farthest distance to the toxic endpoint.

RMPR allows for the use of other meteorological combinations of atmospheric stability and wind speed data, if at all times for the past 3 years, site-specific data displays a higher minimum wind speed or a less stable atmosphere. Since sufficient site-specific meteorological data were not available, the meteorological combination of atmospheric stability F and wind speed of 1.5 m/s, as suggested by RMPR, was used for performing the consequence analysis for the worst-case release scenario.

Ambient Temperature

RMPR for the worst-case release analysis require use of the highest daily maximum temperature in the previous three years, and average humidity. Since sufficient site-specific temperature data are not available, the highest temperature was identified from a review of the highest temperatures recorded at the Fontana station, and reported by the South Coast Air Quality Management District (SCAQMD) in their publication "A Climatological Air Quality Profile, California South Coast Air Basin, 1980." Fontana is the nearest station to the CC Fontana facility where long-term ambient temperature data is available. The highest daily temperature was identified as 117°F and used for the dispersion analysis for the worst-case release scenario.

Height of Release

RMPR requires that, for the worst-case release analysis, the release should be assumed to occur at ground level (0 feet). Accordingly, the worst-case release analysis was performed for this height of release.

Surface Roughness

RMPR requires that either urban or rural topography be used for performing the air dispersion analysis for the identified release scenarios. The rural and urban topographical conditions are characterized in the air dispersion models in terms of surface roughness. The rural condition, defined by RMPR as "no buildings in the immediate area and the terrain is generally flat and unobstructed" [Section 2750.2 (e)]. Urban terrain is characterized by numerous obstacles, including buildings or trees. In general, without encountering many rough surface features to create air turbulence, a regulated substance plume will travel a longer distance.

Area maps were reviewed and an inspection of the surrounding terrain and buildings was performed to select site-specific surface conditions. Since many buildings surround the existing CC Fontana facility, ammoniacal copper solution storage facility location was characterized as an urban area for air dispersion analysis.

Dense or Neutrally Buoyant Gases

RMPR requires that the models used for dispersion analysis should appropriately account for the density of the released gas. The ammonia cloud formed during the worst-case release scenario would be neutrally buoyant. United States Environmental Protection Agency (EPA) has developed various neutrally or positively buoyant atmospheric models for dispersion studies of gases with densities lower than or equal to ambient air density. The neutrally or positively buoyant models assume that the dispersion is the result of the turbulent motion that characterizes the atmospheric boundary layer. The presence of the pollutant is assumed not to affect the atmospheric flow patterns. The neutrally buoyant atmospheric models can be grouped under two categories, depending upon the release duration of the pollutant: (1) short-term (PUFF) release models, and (2) steady-state models for sources emitting continuously or for time periods equal to or greater than the travel time from the source to the point of interest.

For this air dispersion modeling study, EPA's SCREEN3, a steady state screening model was used. The results obtained using this model are expected to be conservative (higher concentrations). SCREEN3 is a Gaussian dispersion model applicable to continuous releases of non-reactive, non-dense gases that are emitted from point or area sources. The model provides maximum ground level concentrations and distances to the maximum concentration based on a pre-selected range of worst-case meteorological combinations. The wind speed and stability class combinations considered by the SCREEN3 model includes the EPA recommended default combination of wind speed of 1.5 m/s and atmospheric stability of F. The SCREEN3 model predicts one-hour average concentrations for the modeled pollutant.

Temperature of Released Substance

The maximum ambient temperature of 117°F was also used as the release temperature of the ammoniacal copper solution.

WORST-CASE RELEASE SCENARIO SELECTED FOR AIR DISPERSION MODELING STUDY

RMPR requires that a worst-case release scenario analysis be performed in compliance with specified conditions, as detailed below.

Number of Release Scenarios

RMPR requires the performance of a consequence analysis for one worst-case release scenario, estimated to create the greatest distance in any direction to a toxic endpoint. The worst-case release scenario selected was the crack/rupture of the ammoniacal copper solution filling pipe. This scenario was selected in consultation with the San Bernardino County Fire Department, the Administrative Agency for the CC Fontana facility during a site visit meeting on August 18, 2003. A tank rupture scenario was not considered because the spilled ammoniacal copper solution will be fully contained in the steel vault, which will be fully enclosed. The release of ammonia vapor from the steel vault will be minimal.

Worst-case Release Quantity

The worst-case scenario assumes that the entire contents of the ammoniacal copper solution contained in the filling pipe would be released, regardless of how improbable that may be. In addition, only “passive” mitigation methods such as buildings or dikes can be considered. Passive mitigation, as defined, requires no mechanical, electrical, or human input. The regulations require that the worst-case scenario assume atmospheric conditions that are conservative and result in large impact areas. A release of 5 pounds of ammonia present in the filling pipe represents the worst-case release quantity. It should be noted that the tank will be filled from the top; thus, there would be no backflow of ammoniacal solution from the tank in case of a crack/rupture in the fill line. This control is considered as a passive mitigation.

Worst-case Release Scenario for Toxic Liquids

For estimating the release rate of ammonia to the air it was assumed that all ammoniacal solution contained in the pipe would spread instantaneously to a depth of one centimeter in an undiked area. The release rate of ammonia to air was estimated using the area covered by the full release of ammoniacal solution and vapor pressure of 11% aqueous ammonia at the highest daily temperature of 117°F.

A summary of all the parameters selected for the consequence analysis is presented in Table 1. Details of the calculations are presented in Appendix A.

**Dispersion Model Summary Sheet for the
Worst-Case Release Scenario**

Input Parameter	Release Scenario: Tank De-Inventory Release
Ammonia Release Quantity (lb)	5
Release Rate from Undiked Area (lb/min)	0.42
Release Time (sec)	Instantaneous to the Pool
Physical State	Vapor
Release Direction	Ground
Release Temperature (°F)	117
Ambient Temperature (°F)	117
Stability Class	F
Wind Speed (m/s)	1.5
EPA Toxic Endpoint	200 ppm

Dispersion Modeling Results

The results of the SCREEN3 model analysis indicated that ammonia concentration of 200-ppm would not extend to the closest fence-line. The closest fence-line is at a distance of 100 feet (30 meters) and ammonia concentration at this distance was predicted at 124 ppm, which is lower than the ammonia toxic endpoint concentration of 200 ppm. The SCREEN3 model output printout is included in Appendix A.

CONCLUSIONS

As mentioned above, processes with no public receptors within the distance to the toxic endpoint from a worst-case release scenario, and no accidents with specific off-site consequences within the past five years are eligible for Program Level 1. Since the toxic endpoint distance for the worst-case release scenario would not extend beyond the CC Fontana facility fence-line and also because no accidental releases involving ammoniacal copper solution have occurred at the CC Fontana facility during the last five years, which would fall under the RMPR specified categories, the proposed ammoniacal copper solution storage and handling process would be eligible for Program Level 1 classification.

The RMPR specified accident categories include only those accidents, which must have caused at least one of the following:

- On-site deaths, injuries, or significant property damage; or
- Known offsite deaths, injuries, property damage, environmental damage, evacuations, or sheltering in place.

REFERENCES

- EPA, 1998. "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources," August.
- EPA, 1999. "EPA Risk Management Program Level Offsite Consequence Analysis Guidance," May.

Appendix A

A-1 Input Data – Worst-Case Release Scenario

A-2 SCREEN3 Model Output

A-3 Results of RMP*Comp Modeling

Appendix A-1

Input Data Worst-Case Release Scenario

APPENDIX A-1

INPUT DATA - WORST CASE RELEASE SCENARIO
(2" DIAMETER PIPE RUPTURE - NW 200-C MIXTURE)

JOB NO: 440731
DATE: 8/31/2003
FILE: R1440\CascadeWorst Case.xls

BY: J. Lipscomb
CHECKED: Kelvin Lu

INPUT DATA

(1) Maximum Ambient Temperature	117 °F
(2) Diameter of Pipe Used to Fill NW 200-C Mixture in the Storage Tank	2 inch
(3) Length of Pipe Used to Fill NW 200-C Mixture in the Storage Tank	30 feet
(4) Release Height	0 m
(5) Molecular Weight of Ammonia	17.031 kg/kmol
(6) Wind Speed	1.5 m/sec
(7) Toxic Endpoint for Ammonia	200 ppm
(8) Highest Percentage of Aqueous Ammonia in NW 200-C Mixture	11 %
(9) Calculated Vapor Pressure of Aqueous Ammonia (11%) at 117°F	208.5 mmHg
(10) Depth of Pool Formed after Release of NW 200-C Mixture	1 cm
(11) Minimum Distance to Fence Line	30 m

CALCULATIONS - WORST CASE RELEASE SCENARIO
(2" DIAMETER PIPE RUPTURE - NW 200-C MIXTURE)

JOB NO: 440731
DATE: 8/31/2003
FILE: R1440\CascadeWorst Case.xls

BY: J. Lipscomb
CHECKED: Kelvin Lu

CALCULATIONS - CALCULATION OF AMMONIA RELEASE PARAMETERS FOR THE WORST CASE RELEASE SCENARIO (RUPTURE OF NW 200-C FILLING PIPE)

Calculation of Volume of NW 200-C Mixture in the Pipe

- | | |
|---|------------------|
| (1) Diameter of Pipe Used to Fill NW 200-C Mixture in the Storage Tank | 2 inch |
| Diameter of Pipe Used to Fill NW 200-C Mixture in the Storage Tank in ft, D | 0.167 ft |
| (2) Length of Pipe Used to Fill NW 200-C Mixture in the Storage Tank, L | 30 feet |
| (3) Volume of NW 200-C Mixture in the Pipe, cubic feet | 0.657 cubic feet |
| = $L \times 3.14 \times (D \times D/4)$ cubic feet | |
| (4) Volume of NW 200-C Mixture in the Pipe, cubic centimeter, Vt | 18604 cubic cm |
| V = 0.657 x 30.48 x 30.48 x 30.48 | |

Calculation of Surface Area of Pool of NW 200-C Mixture (No Dike)

- | | |
|--|-----------------------|
| (5) Depth of the Pool, H | 1 cm |
| (6) Area of Pool in Square Centimeter , A | 18604 cm ² |
| = V/H | |
| (7) Area of Pool in Square Feet, A1 | 20.03 ft ² |
| = A / (30.48 x 30.48) | |
| (8) Area of Pool in Square Meter, A2 | 1.86 m ² |
| = A / (100 x 100) | |
| (8) Length and Width of a Square with Area A, cm | 136.4 cm |
| (9) Length and Width of a Square with Area A, m | 1.36 m |

**CALCULATIONS - WORST CASE RELEASE SCENARIO
(2" DIAMETER PIPE RUPTURE - NW 200-C MIXTURE)**

JOB NO: 440731
 DATE: 8/31/2003
 FILE: R1440\CascadeWorst Case.xls

BY: J. Lipscomb
 CHECKED: Kelvin Lu

**CALCULATIONS - CALCULATION OF AMMONIA RELEASE PARAMETERS FOR THE
 WORST CASE RELEASE SCENARIO (RUPTURE OF NW 200-C FILLING PIPE)**

Calculation of Ammonia Evaporation Rate from the Pool

- | | |
|---|-----------------------------|
| (10) Maximum Ambient Temperature, °F | 117 °F |
| Maximum Ambient Temperature, K, T
= [(F-32) x 5/9] + 273.15 | 320.4 K |
| (11) Vapor Pressure of 11% Aqueous Ammonia at 117 °F, VP
(See details on next page, 4) | 208.5 mmHg |
| (12) Molecular Weight of Ammonia, MW | 17.031 lb/lb-mol |
| (13) Surface Wind Speed, U | 1.5 m/sec |
| (14) Constant in the Evaporation rate Equation, K | 0.0035 |
| (15) Release Rate in Pounds per Minute, QR | 0.42 lbs/min |
| $QR = (K \times U^{0.78} \times MW^{0.67} \times A1 \times VP) / T$ | |
| (16) Release Rate in g/sec
=[0.42 (lbs/min)*(453.592 (g/lb))] / 60(sec) | 3.175 g/sec |
| (17) Release Rate per Unit Area of the Pool (g/ m ² -sec
=3.175 (g/sec) / 1.86 m ²) | 1.71 g/ m ² -sec |

Calculation of Total Quantity of Ammonia Released, Qs

- | | |
|---|--------------------------|
| (18) Specific Gravity of Ammoniacal Copper Solution, SG | 1.2 |
| (19) Density of Water, p | 62.4 lbs/ft ³ |
| (20) Quantity of Ammoniacal Copper Solution Released, Qac
= p x SG x Volume of Solution Released | 49.2 lbs |
| (21) Total Quantity of Ammonia Released, Qs
= 0.11 x Qac | 5 lbs |

Calculation of Vapor Pressure of 11% Aqueous Ammonia

The worst-case scenario analysis requires the use of vapor pressure at the maximum ambient temperature of 117°F. Vapor pressure of 11% aqueous ammonia at 117°F was estimated in two steps. In the first step, vapor pressure at 77°F was estimated by extrapolating the vapor pressure provided at a wind speed of 1.5 m/sec for aqueous ammonia concentrations at 20%, 24% and 30% in the Risk Management Program Guidance for Offsite Consequence Analysis, page B-7 (EPA 550-B-99-009). Figure A-1 shows the curve fitted using the aqueous ammonia initial concentration and vapor pressure for wind speed of 1.5 m/sec.

Using Figure A-1, the vapor pressure of aqueous ammonia at 77°F was estimated at 115.81 mmHg. In step 2, a correction factor was calculated using the results of RMP*Comp runs for 20%, 24% and 30% aqueous ammonia solutions at 77°F and 117°F. The emission rate estimated by RMP*Comp model is directly proportional to the vapor pressure. Thus, the ratio of emission rates at 117°F and 77°F is expected to provide the correction factor which could be used for calculating the vapor pressure at higher temperature when the vapor pressure at a lower temperature is available. The highest value of this ratio of 1.8 (for the three aqueous ammonia concentrations) obtained from RMP*Comp model run was used to estimate the vapor pressure of 11% aqueous ammonia at 117°F. The vapor pressure at 117°F was estimated at 208.5 mmHg (1.8 x 115.81).

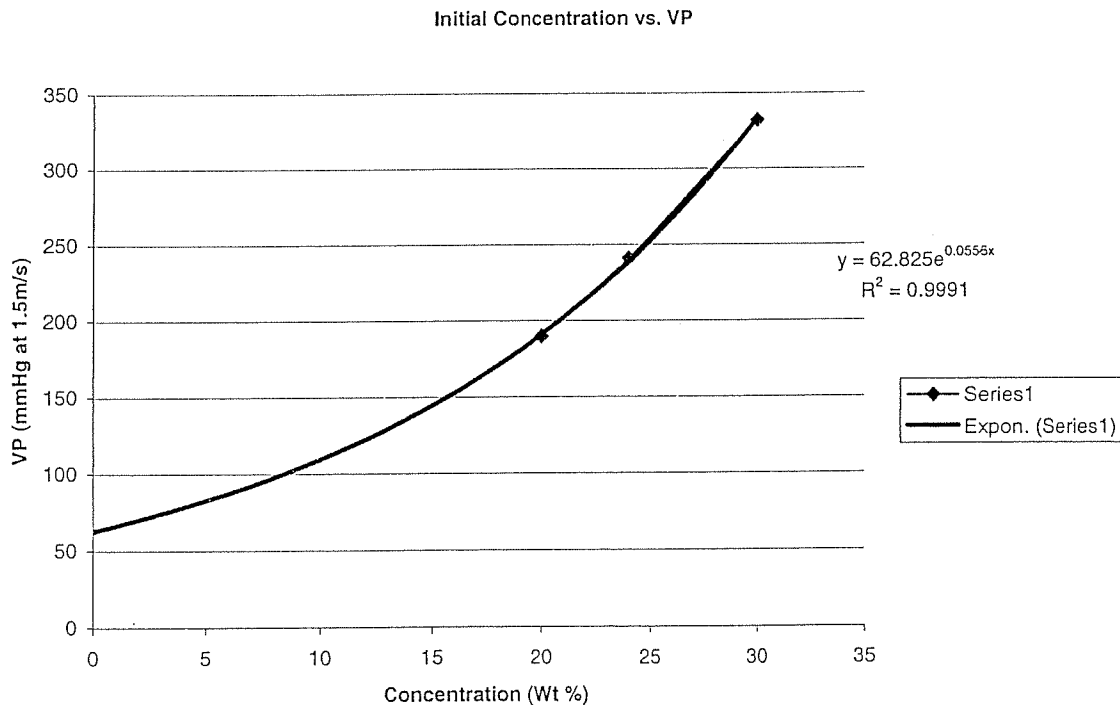


Figure A-1: Initial Concentration vs. Vapor Pressure

SCREEN3 MODELING PARAMETERS

JOB NO: 440731
DATE: 8/31/2003
FILE: R1440\CascadeWorst Case.xls

BY: J. Lipscomb
CHECKED: Kelvin Lu

(1) Ambient Temperature	320.4 K
(2) Length of Each Side of a Square Pool	1.36 m
(3) Ammonia Emission Rate	1.71 g/(m ² s)
(4) Height of release	0.0 m
(5) Gas molecular weight	17.031 kg/kmol
(6) Toxic Endpoint of Ammonia	200 ppm
(7) Minimum Distance to Fence Line	30 m

MODEL RESULTS - WORST CASE RELEASE SCENARIO
(2" DIAMETER PIPE RUPTURE - NW 200-C MIXTURE)

JOB NO: 440731
DATE: 9/8/2003
FILE: R1440\CascadeWorst Case.xls

BY: J. Lipscomb
CHECKED: Kelvin Lu

SCREEN3 MODEL RESULTS

(1) Maximum Ammonia Concentration from SCREEN 3 Model Run, Cmax 8.657E+04 ug/m³
(2) Molecular Weight of Ammonia, MW 17.031 g/g-mol
(4) Conversion of Ammonia Concentration to ppm, MV 124 ppm
 = Cmax x 0.02445/ MW

Appendix A-2

SCREEN3 Model Output

09/10/03
09:29:42

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

Release of NW 200-C Mixture Containing 11% of Ammonia - Cascade Facility

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA
EMISSION RATE (G/(S-M**2)) = 1.71000
SOURCE HEIGHT (M) = .0000
LENGTH OF LARGER SIDE (M) = 1.3600
LENGTH OF SMALLER SIDE (M) = 1.3600
RECEPTOR HEIGHT (M) = .0000
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = .000 M**4/S**3; MOM. FLUX = .000 M**4/S**2.

*** STABILITY CLASS 5 ONLY ***
*** ANEMOMETER HEIGHT WIND SPEED OF 1.50 M/S ONLY ***

*** SCREEN DISCRETE DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	.1237E+06	5	1.5	1.5	10000.0	.00	36.
30.	.8657E+05	5	1.5	1.5	10000.0	.00	5.

*** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	.1237E+06	25.	0.

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

Appendix A-3

**Results of RMP*Comp Modeling
(To estimate the correction factor for vapor pressure for a
temperature of 117°F)**

RMP*Comp Ver. 1.07
Results of Consequence Analysis

Chemical: Ammonia (water solution) 20%
CAS #: 7664-41-7
Category: Toxic Liquid
Scenario: Worst-case
Quantity Released: 1000 gallons
Liquid Temperature: 77 F

Mitigation Measures: NONE
Release Rate to Outside Air: 85.1 pounds per minute
Topography: Urban surroundings (many obstacles in the immediate area)
Toxic Endpoint: 0.14 mg/L; basis: ERPG-2
Estimated Distance to Toxic Endpoint: 0.2 miles (0.3 kilometers)

-----Assumptions About This Scenario-----
Wind Speed: 1.5 meters/second (3.4 miles/hour)
Stability Class: F
Air Temperature: 77 degrees F (25 degrees C)

Ratio of release rate at 117°F (153 lbs/min)
and at 77°F (85.1 lbs/min) = $153/85.1 = 1.8$

Note: The ratio of 1.8 for 20% solution is the highest of the three solutions
(20%, 24%, and 30%) modeled.

RMP*Comp Ver. 1.07
Results of Consequence Analysis

Chemical: Ammonia (water solution) 20%
CAS #: 7664-41-7
Category: Toxic Liquid
Scenario: Worst-case
Quantity Released: 1000 gallons
Release Duration: 10 min
Release Rate: 153 pounds per min
Liquid Temperature: 117 F

Mitigation Measures: NONE
Topography: Urban surroundings (many obstacles in the immediate area)
Toxic Endpoint: 0.14 mg/L; basis: ERPG-2
Estimated Distance to Toxic Endpoint: 0.2 miles (0.3 kilometers)

-----Assumptions About This Scenario-----

Wind Speed: 1.5 meters/second (3.4 miles/hour)
Stability Class: F
Air Temperature: 77 degrees F (25 degrees C)

RMP*Comp Ver. 1.07
Results of Consequence Analysis

Chemical: Ammonia (water solution) 24%
CAS #: 7664-41-7
Category: Toxic Liquid
Scenario: Worst-case
Quantity Released: 1000 gallons
Liquid Temperature: 77 F

Mitigation Measures: NONE
Release Rate to Outside Air: 108 pounds per minute
Topography: Urban surroundings (many obstacles in the immediate area)
Toxic Endpoint: 0.14 mg/L; basis: ERPG-2
Estimated Distance to Toxic Endpoint: 0.2 miles (0.3 kilometers)

-----Assumptions About This Scenario-----
Wind Speed: 1.5 meters/second (3.4 miles/hour)
Stability Class: F
Air Temperature: 77 degrees F (25 degrees C)

Ratio of release rate at 117°F (180 lbs/min)
and at 77°F (108 lbs/min) = $180/108 = 1.7$

RMP*Comp Ver. 1.07
Results of Consequence Analysis

Chemical: Ammonia (water solution) 24%
CAS #: 7664-41-7
Category: Toxic Liquid
Scenario: Worst-case
Quantity Released: 1000 gallons
Release Duration: 10 min
Release Rate: 180 pounds per min
Liquid Temperature: 117 F

Mitigation Measures: NONE
Topography: Urban surroundings (many obstacles in the immediate area)
Toxic Endpoint: 0.14 mg/L; basis: ERPG-2
Estimated Distance to Toxic Endpoint: 0.3 miles (0.5 kilometers)

-----Assumptions About This Scenario-----

Wind Speed: 1.5 meters/second (3.4 miles/hour)
Stability Class: F
Air Temperature: 77 degrees F (25 degrees C)

RMP*Comp Ver. 1.07

Results of Consequence Analysis

Chemical: Ammonia (water solution) 30%
CAS #: 7664-41-7
Category: Toxic Liquid
Scenario: Worst-case
Quantity Released: 1000 gallons
Liquid Temperature: 77 F

Mitigation Measures: NONE
Release Rate to Outside Air: 147 pounds per minute
Topography: Urban surroundings (many obstacles in the immediate area)
Toxic Endpoint: 0.14 mg/L; basis: ERPG-2
Estimated Distance to Toxic Endpoint: 0.2 miles (0.3 kilometers)

-----Assumptions About This Scenario-----

Wind Speed: 1.5 meters/second (3.4 miles/hour)
Stability Class: F
Air Temperature: 77 degrees F (25 degrees C)

Ratio of release rate at 117°F (221 lbs/min)
and at 77°F (147 lbs/min) = $221/147 = 1.5$

RMP*Comp Ver. 1.07
Results of Consequence Analysis

Chemical: Ammonia (water solution) 30%
CAS #: 7664-41-7
Category: Toxic Liquid
Scenario: Worst-case
Quantity Released: 1000 gallons
Release Duration: 10 min
Release Rate: 221 pounds per min
Liquid Temperature: 117 F

Mitigation Measures: NONE
Topography: Urban surroundings (many obstacles in the immediate area)
Toxic Endpoint: 0.14 mg/L; basis: ERPG-2
Estimated Distance to Toxic Endpoint: 0.3 miles (0.5 kilometers)

-----Assumptions About This Scenario-----

Wind Speed: 1.5 meters/second (3.4 miles/hour)
Stability Class: F
Air Temperature: 77 degrees F (25 degrees C)

Project No.
5827.5.001.01

October 23, 2003

Mr. Mike Krause
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Subject: California Cascade Fontana
Fontana, California

TRANSMITTING A COPY OF THE RMP

Dear Mr. Krause:

Attached is a copy of the Risk Management Plan (RMP) submitted by California Cascade Fontana to the San Bernadino County Fire Department and referenced in the recent letter delivered to you.

California Cascade Fontana signed the copy of the plan that was delivered to the County. The attached, however, is not signed as we reproduced the document from our electronic files.

If you have any questions or comments regarding this letter, please call and we will be glad to discuss them with you.

Sincerely,

ENGEO Incorporated



Dennis B. Nakamoto, C.E.G., C.HG., REA II
Associate

Rvd by MMG

Cc: Mr. Gary Galbraith, California Cascade

Attachment: RMP



CUPA

San Bernardino County Fire Department • Hazardous Materials Division
620 South "E" Street, San Bernardino, CA 92415-0153 • (909) 386-8401 FAX (909) 386-8460

CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM (CaiARP) REGISTRATION

Page 1 of 1

FACILITY ID: [Redacted] F A [Redacted] [Redacted] [Redacted] [Redacted] [Redacted] [Redacted] [Redacted] [Redacted]

I. FACILITY / STATIONARY SOURCE IDENTIFICATION

STATIONARY SOURCE NAME 2203 PHONE 2204

STATIONARY SOURCE ADDRESS 2205 CITY 2206

II. OWNER/OPERATOR IDENTIFICATION

OWNER/OPERATOR NAME 2207 PHONE 2208

Hank Feenstra, California Cascade Fontana (909) 681-1240

MAILING ADDRESS 2209 CITY 2210 STATE 2211 ZIP CODE 2212

8395 Sultana Avenue Fontana CA 92335

III. REGULATED SUBSTANCES LIST

A. Name of Each Regulated Substance:	2213	2214	2215	2216
		Percent by Weight	Process Maximum Quantity (lbs.)	CAS #
1. Ammonium Hydroxide		12	833 lbs.	1336-21-6
2. _____				
3. _____				

B. Name of Each Regulated Substance in a Mixture:	2217	2218	2219	2220
		Percent by Weight	Process Maximum Quantity (lbs.)	CAS #
1a. NW200C Copper aqueous ammonia solution		26%	10,000 gal.	
1b. _____				
1c. _____				
2a. _____				
2b. _____				
2c. _____				

NOTES (Conversion Factors, Calculation Notes, Mixture Information, etc. Note which substance or mixture the note applies to): 2223

IV. CERTIFICATION

I, as the owner or operator of the aforementioned business, hereby certify that the registration information provided above is true, accurate and complete to the best of my knowledge, based upon reasonable inquiry. I am fully aware that this certification, executed on the date indicated below, is made under penalty of perjury under the laws of the State of California.

SIGNATURE OF OWNER/OPERATOR DATE 2224

NAME OF OWNER/OPERATOR 2225 TITLE OF OWNER/OPERATOR 2226

RMP Report for California Cascade Fontana, Inc.

Section 1. Registration Information

1.1 Source Identification: Facility ID: 1 There were no reportable accidents in the last 5 years.

a. Facility Name: California Cascade Fontana, Inc.

b. Parent Company #1 Name:

c. Parent Company #2 Name:

1.2 EPA Facility Identifier:

1.3 Other EPA Systems Facility ID: CAL000047107

1.4 Dun and Bradstreet Numbers (DUNS):

a. Facility DUNS:

b. Parent Company #1 DUNS:

c. Parent Company #2 DUNS:

1.5 Facility Location Address:

a. Street 1: 8395 Sultana Avenue

b. Street 2:

c. City: Fontana d. State: CA e. Zip: 92335 -

f. County: San Bernardino

Facility Latitude and Longitude:

g. Lat. (ddmmss.s): 34 06 04.3 h. Long. (dddmmss.s): -117 28 08.9

i. Lat/Long Method: I1 Interpolation - Map

j. Lat/Long Description: PF Plant Entrance (Freight)

1.6 Owner or Operator:

a. Name: California Cascade Fontana, Inc.

b. Phone: (909) 357-2136

Mailing address:

c. Street 1: 8395 Sultana Avenue d. Street 2:

e. City: Fontana f. State: CA g. Zip: 92335 -

1.7 Name and title of person or position responsible for part 68 (RMP) implementation:

Facility Name: California Cascade Fontana, Inc.
EPA ID:

- a. Name of person: Robert Ueberroth
- b. Title of person or position: Plant Manager

1.8 Emergency contact:

- a. Name: Robert Ueberroth
- b. Title: Plant Manager
- c. Phone: (909) 357-2136
- d. 24-hour phone: (909) 319-9824
- e. Ext. or PIN:

1.9 Other points of contact:

- a. Facility or Parent Company E-Mail Address:
- b. Facility Public Contact Phone:
- c. Facility or Parent Company WWW Homepage Address:

1.10 LEPC:

1.11 Number of full time employees on s 27

1.12 Covered by:

- a. OSHA PSM: No
- b. EPCRA 302: No
- c. CAA Title V: No Air operating permit ID:

1.13 OSHA Star or Merit Ranking: No

1.14 Last Safety Inspection (by an External Agency) Date:

1.15 Last Safety Inspection Performed by an External Agency: Never had one

1.16 Will this RMP involve predictive filing?: No

Section 1.17 Process(es)

a. Process ID: 1 Program Level 1 Wood Preservation

b. NAICS Code

321114 Wood Preservation

c. Process Chemicals

c.1 Process Chemical (ID / Name)

c.2 CAS Nr.

c.3 Qty (lbs.)

1 Ammonia (anhydrous)

7664-41-7

7,300

Section 2. Toxics: Worst Case

Toxics: Worst Case ID 1

- 2.1 a. Chemical Name: Ammonia (anhydrous)
- b. Percent Weight of Chemical (if in a mixture): 11.0
- 2.2 Physical State: Liquid
- 2.3 Model used: Refer to Attached Air Dispersion Modeling Study
- 2.4 Scenario: Liquid spill & Vaporization
- 2.5 Quantity released: 6 lbs
- 2.6 Release rate: 0.4 lbs/min
- 2.7 Release duration: mins
- 2.8 Wind speed: 1.5 m/sec
- 2.9 Atmospheric Stability Class: F
- 2.10 Topography: Urban
- 2.11 Distance to Endpoint: 0.02 mi
- 2.12 Estimated Residential population within distance to endpoint: 0
- 2.13 Public receptors within distance to endpoint:
- | | | | |
|---------------------|----|---|----|
| a. Schools: | No | d. Prisons/Correction facilities: | No |
| b. Residences: | No | e. Recreation areas: | No |
| c. Hospitals: | No | f. Major commercial, office or, industrial areas: | No |
| g. Other (Specify): | | | |
- 2.14 Environmental receptors within distance to endpoint:
- | | |
|---|----|
| a. National or state parks, forests, or monuments: | No |
| b. Officially designated wildlife sanctuaries, preserves, or refuges: | No |
| c. Federal wilderness areas: | No |
| d. Other (Specify): | |
- 2.15 Passive mitigation considered:
- | | | | |
|----------------|-----|---------------------|-----|
| a. Dikes: | Yes | d. Drains: | No |
| b. Enclosures: | Yes | e. Sumps: | Yes |
| c. Berms: | Yes | f. Other (Specify): | |
- 2.16 Graphic file name:

Section 3. Toxics: Alternative Release --- No Data To Report

Section 4. Flammables: Worst Case --- No Data To Report

Section 5. Flammables: Alternative Release --- No Data To Report

Section 6. Accident History --- No Data To Report

Section 7. Prevention Program 3 --- No Data To Report

Section 8. Prevention Program 2 --- No Data To Report

Section 9. Emergency Response

9.1 Written Emergency Response (ER) Plan:

- a. Is facility included in written community emergency response plan? No
- b. Does facility have its own written emergency response plan? Yes

9.2 Does facility's ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)? Yes

9.3 Does facility's ER plan include procedures for informing the public and local agencies responding to accidental releases? Yes

9.4 Does facility's ER plan include information on emergency health care? Yes

9.5 Date of most recent review or update of facility's ER plan: 07/01/2003

9.6 Date of most recent ER training for facility's employees: 07/01/2003

9.7 Local agency with which facility's ER plan or response activities are coordinated:

- a. Name of agency: San Bernadino County Fire Departmen
- b. Telephone number: (909) 386-8401

9.8 Subject to:

- a. OSHA Regulations at 29 CFR 1910.38: No
- b. OSHA Regulations at 29 CFR 1910.120: No
- c. Clean Water Act Regulations at 40 CFR 112: No
- d. RCRA Regulations at 40 CFR 264, 265, and 279.52: No
- e. OPA-90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254: No
- f. State EPCRA Rules/Law: Yes
- g. Other (Specify):

Executive Summary

Facility Description and Regulated Substances Handled

This facility is a wood preserving plant. It is situated in an urban industrial park on a 10.8-acre site. Activities at the facility include receiving (by road and rail) and storage of freshly sawn lumber, preparation of the lumber for chemical preservation, application of chemical preservatives in pressure vessels, drying of the freshly treated wood under controlled conditions, storage of the treated products pending sales, and shipment of products by truck.

The single regulated chemical at this wood preserving plant has the trade name NW200-C. It is an aqueous ammoniacal solution of copper. NW200-C is 7.3 weight percent NH₃ and 8.0 weight percent Cu. It weighs 10 pounds per gallon and is stored in a 10,000-gallon horizontal cylindrical steel storage tank situated in a steel secondary containment vessel. The two steel structures are situated above a concrete sump. NW200-C is regulated in consideration of its ammonia content. Other manufacturing chemicals stored at the facility include NW100-C, BAC-Q, and borate fire retardant. NW100-C is an 11.25% concentrate of copper oxide (CuO) in aqueous monoethanolamine. Each gallon of this substance weighs 10.6 pounds and contains one pound of copper. It is stored in a 20,000-gallon steel tank situated in a concrete secondary containment structure. BAC-Q is a 50% aqueous solution of alkylbenzylammonium chloride, a clear to milky viscous solution delivered to the facility in bulk and is stored in a 10,000-gallon steel tank situated in a concrete secondary containment structure..

Untreated lumber is first processed at the facility by passing it piece-by-piece through an incisor machine. This operation is carried out in a 200-ft² building. The incisor scores the surface of the lumber with numerous knife cuts to facilitate penetration of wood preserving chemicals. After incising, forklift trucks move the lumber to another building where it is loaded into a pressure vessel that is then flooded with a diluted mixture of the treatment chemicals. After one to three hours of infusion by the chemicals the lumber is allowed to drip dry on a protected surface. When dry, it is stored in one of three 20,000-ft²-storage buildings pending shipment to customers.

The facility has about 40 employees working two shifts throughout the year.

Accidental Release Prevention and Emergency Response Policies

All liquid chemicals at the facility, whether full strength or diluted, are stored in steel tanks within a "tank farm", which is a below-grade concrete structure of such a capacity that even if the tanks all ruptured their contents would be secondarily contained within it. None of the chemicals is extremely hazardous and there would be no adverse result if they were unexpectedly mixed together in any proportion. NW200-C is singled out for special regulation because of its ammonia concentration. An uncontrolled spill of NW200-C to form a puddle with a surface exposed to the air would result in ammonia volatilizing. The possible transport of volatilized ammonia by air currents to neighboring properties in unacceptable concentrations has been evaluated and has been found not to be a significant risk.

Passive mitigation against accidental release of chemicals is in place in the form of the secondary containment offered by the tank farm. Additional passive mitigation measures are in place for the NW200-C storage because of its special potential to release ammonia vapors to the environment if it were spilled.

The NW200-C steel storage tank is 8 feet in diameter and 28 feet long. The storage tank is completely enclosed within a secondary containment vessel that is also made of steel and is 34 feet long by 15 feet wide by 10 feet tall. The storage tank and the secondary containment vessel are both vented. They are installed 8 feet above grade over the below-grade containment area that holds the other liquid storage tanks.

NW200-C is delivered to the facility in 3000-gallon tank trucks. The delivery trucks park in a bermed area that drains into the below-grade containment area. The product is pumped from the delivery truck into the storage tank. Air being displaced by the incoming liquid leaves the tank through a pressure and vacuum relief valve. The pump is controlled by a normally-open switch ("dead man's throttle") that can only be closed by operator action. Thus, the contents of the delivery truck can not be inadvertently discharged to the ground. The static volume of the delivery line determines the maximum spill that could originate from a parted delivery line.

Withdrawals of NW200-C from the storage tank for production occur by pumping the material upward under vacuum from the storage tank to the top of one of the working tanks. The pump is controlled by a normally-open

switch ("dead man's throttle") that can only be closed by operator action. Thus, the product can not be inadvertently discharged to the ground. The static volume of the delivery line determines the maximum spill that could originate from a parted delivery line. Should such a spill occur it would be into the below-grade containment area.

The steel secondary containment vessel around the 10,000-gallon storage tank is 27 feet by 15 feet with 10-foot walls. A spill of 10,000 gallons into this vessel would fill it to a depth of 40 inches. The vessel is totally enclosed and is equipped with a pressure and vacuum relief valve. If liquid is spilled into the secondary containment vessel it will be isolated from the atmosphere except through the vent.

To summarize the components of the Risk Management Program with respect to the storage of NW200-C:

- The main storage tank is secondarily contained within a vessel able to contain its entire contents.
- The secondary containment vessel is totally enclosed to eliminate any liquid air contact in the event that liquid invades the vessel.
- Deliveries of NW200-C to the storage tank take place only with "fail-safe" procedures.
- Withdrawals of NW200-C from the storage tank for production take place only with "fail-safe" procedures.

Worst-Case Release Scenario

The worst-case release scenario is that the 2-inch delivery line connecting the NW200-C storage tank to the pump on top of the work tank (35 feet) ruptures at a point just external to the secondary containment vessel. The resulting spill would be the entire contents of the delivery line or 22 liters (5.7 gallons). This would create a puddle with an area of 2.2 square meters (23 square feet). This puddle would form on the floor of the secondary containment structure, which is 5 feet below grade. Temperature of the spilled liquid is assumed to be 114 degrees Fahrenheit. The ammonia content of the assumed spilled liquid is 6 pounds. If all the ammonia instantaneously volatilized in the pool, Screen3 computes the distance to the Toxic End Point (TEP) as 30 meters.

Accidental Release Prevention Program

Accidental releases of chemicals are prevented by passive controls at the facility. All chemicals are stored in regularly inspected and maintained steel tanks situated within a concrete secondary containment area. In the event of a rupture of one or all of the storage tanks, the contents would discharge into the secondary containment area. No release to the environment can occur. Storage tanks are refilled periodically. Delivery vehicles are parked in a bermed area that drains to the secondary containment area. The spill would be entirely captured in the secondary containment area even if a transfer hose from a delivery vehicle parts while delivering chemicals.

Five-Year Accident History

There have been no accidents reported at this facility during the past 5 years.

Emergency Response Program

In an emergency requiring evacuation everyone on the facility would be notified by voice or by 2-way radio to proceed to the evacuation location. The evacuation location is the Sultana Avenue gate at the front of the site. If the emergency involves a release or threatened release of a hazardous material notification will be made by telephone to the Local Emergency Response Agency at 911, to the San Bernadino County Fire Department Hazardous Materials Division at (909)386-8425 and to the State of California, Office of Emergency Services at (800)852-7550.

This emergency response procedure is presented in each monthly safety training program, which is compulsory for all employees.

RMP Validation Errors/Warnings for Facility: California Cascade Fontana, Inc.

RECORD ERRORS

Section / Record /Name	Error Type	Error Message
------------------------	------------	---------------

S2 Toxics: Worst Case

1

2.7 Release Duration	ERROR	Required field missing
----------------------	-------	------------------------

AIR DISPERSION MODELING STUDY

**WORST-CASE RELEASE SCENARIO
FOR STORAGE OF AMMONIACAL
COPPER SOLUTION**

AT THE

**CALIFORNIA CASCADE
FONTANA FACILITY**

PREPARED FOR THE

**CALIFORNIA CASCADE FONTANA
8395 SULTANA AVENUE
FONTANA, CALIFORNIA 92335**

SEPTEMBER 2003

PREPARED BY:

PARSONS

DESIGN • RESEARCH • PLANNING

100 WEST WALNUT STREET, PASADENA, CALIFORNIA 91124

R1440

**AIR DISPERSION MODELING STUDY
WORST-CASE RELEASE SCENARIO FOR STORAGE OF
AMMONIACAL COPPER SOLUTION
CALIFORNIA CASCADE FONTANA FACILITY**

INTRODUCTION

California Cascade Fontana Facility (CC Fontana Facility) pressure treats lumber for the retail sale. Their current process uses a copper, chromium and arsenic solution (CCA). The CC Fontana facility is located at 8395 Sultana Avenue, Fontana, California 92335. Figure 1 shows the facility location. By December 2003, CC Fontana facility will stop using CCA and start using an ammoniacal copper solution. The ammoniacal copper solution contains 8% copper and 10 to 11% ammonia solution. It is proposed to store approximately 10,000 gallons of ammoniacal solution in an above ground storage tank. Since the quantity of ammonia in the ammoniacal copper solution stored at the CC Fontana facility will exceed 500 pounds, the CC Fontana facility will be subject to the California Accidental Release Prevention (CalARP) Program Level Regulations (RMPR). The RMPR requires that an owner or operator of a stationary source which may handle, manufacture, use or store more than the threshold quantity of a regulated substance in a process (threshold quantity for ammonia is 500 pounds) shall prepare a Risk Management Plan (RMP) and comply with all the RMPR requirements on the date on which a regulated substance is first present above the threshold quantity in a process.

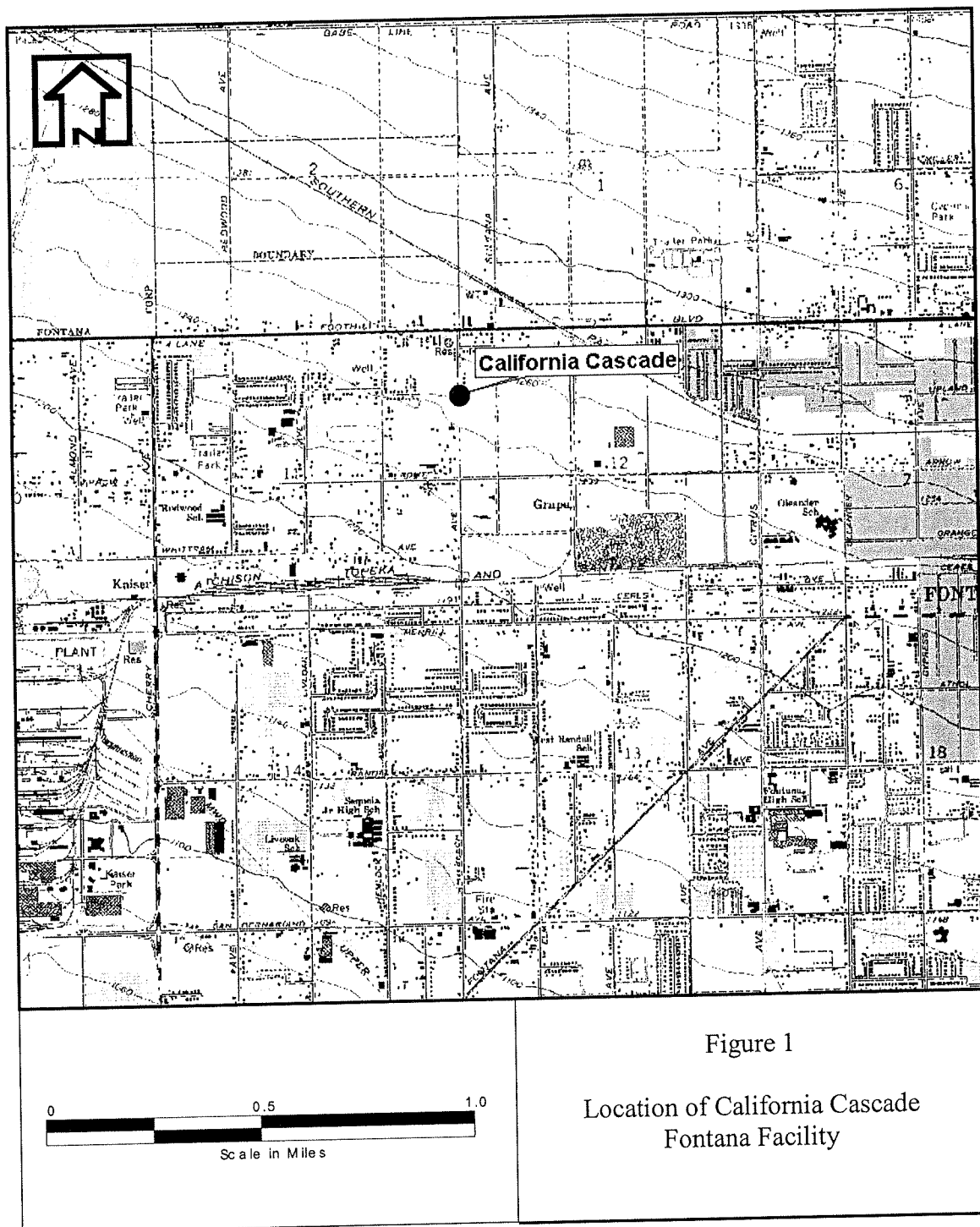
RMPR divides covered processes into three categories, thereby reducing the burden of compliance for certain low-risk sources by requiring such sources to implement less prescriptive risk management Program Levels. The eligibility criteria for three Program Levels are provided below:

Program Level 1: Processes with no public receptors within the distance to the endpoint from a worst-case release and no accidents with specific off-site consequences within the past five years are eligible for Program Level 1. The "worst-case release" is defined as the largest quantity of a regulated substance from a vessel or process line failure that results in the greatest distance to an endpoint.

Program Level 2: Processes not eligible for Program Level 1 or 3 are placed in Program Level 2.

Program Level 3: Processes not eligible for Program Level 1 and either subject to federal or California Occupational Health and Safety Administration (OSHA) Process Safety Management (PSM) Standard or in the specified North American Industrial Classification System (NAICS) Codes are placed in Program Level 3.

A dispersion modeling study was performed for the worst-case release scenario to determine the Program Level of the proposed ammoniacal copper solution process. The details of this air dispersion modeling study are presented below.



PROCESS DESCRIPTION

CC Fontana facility proposes to construct the 10,000-gallon ammoniacal copper solution storage tank on an elevated platform that will be over an existing spill containment dike that surrounds several above ground storage tanks. The 10,000-gallon tank will be approximately 8 feet in diameter and 28 feet in length. The tank will be completely enclosed in a steel vault that would serve as the primary spill containment system as spillage from a tank failure of the 10,000-gallon tank would be fully contained within the vault. In the event that the platform fails, spillage resulting from a failure of the primary containment system would be contained in the underlying spill containment dike. The steel vault will be fully closed and provided with a pressure and vacuum relief valve. Figure 2 shows a plot plan of the facility, including the nearest fence-line from the proposed tank, where public receptors may be present. As shown in Figure 2, the closest fence-line from the proposed ammoniacal tank where public receptors may be present is 100 feet.

The proposed tank will be filled from a tanker truck. The filling pipe that will connect the elevated 10,000-gallon tank to the filling connection will be of diameter 2-inch and length of 30 ft. It should be noted that the proposed tank will be filled from the top; thus, there will be no backflow of ammoniacal solution from the tank in case of a crack/rupture in the fill line.

WORST-CASE RELEASE SCENARIO ANALYSIS PARAMETERS

The worst-case release scenario analysis parameters used for this study are listed below.

Toxic Endpoint

The distance from the point of release to a location at which the regulated toxic substance concentration is equal to or greater than a specified concentration must be determined to define the vulnerability zone. That specified concentration is known as the toxic endpoint. As required by RMPR, the ammonia toxic endpoint used was 0.14 mg/L. This corresponds to a concentration of 200 parts per million by volume (ppm), and represents the American Industrial Hygiene Association (AIHA) Emergency Response Planning Guideline (ERPG-2), which is defined as "the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action."

Wind Speed/Atmospheric Stability Class

RMPR requires the use of a wind speed of 1.5 meters per second (m/s), and an atmospheric stability Class F in the offsite consequence analysis for the worst-case release scenario. Stability classes are categorized by the amount of turbulence in the atmosphere, and are typically divided into six classes (A through F), with F being the least turbulent and A the most turbulent. A typical Class A stability occurs on a sunny day and with high wind speeds, D on a cloudy day with active wind speeds, and F in

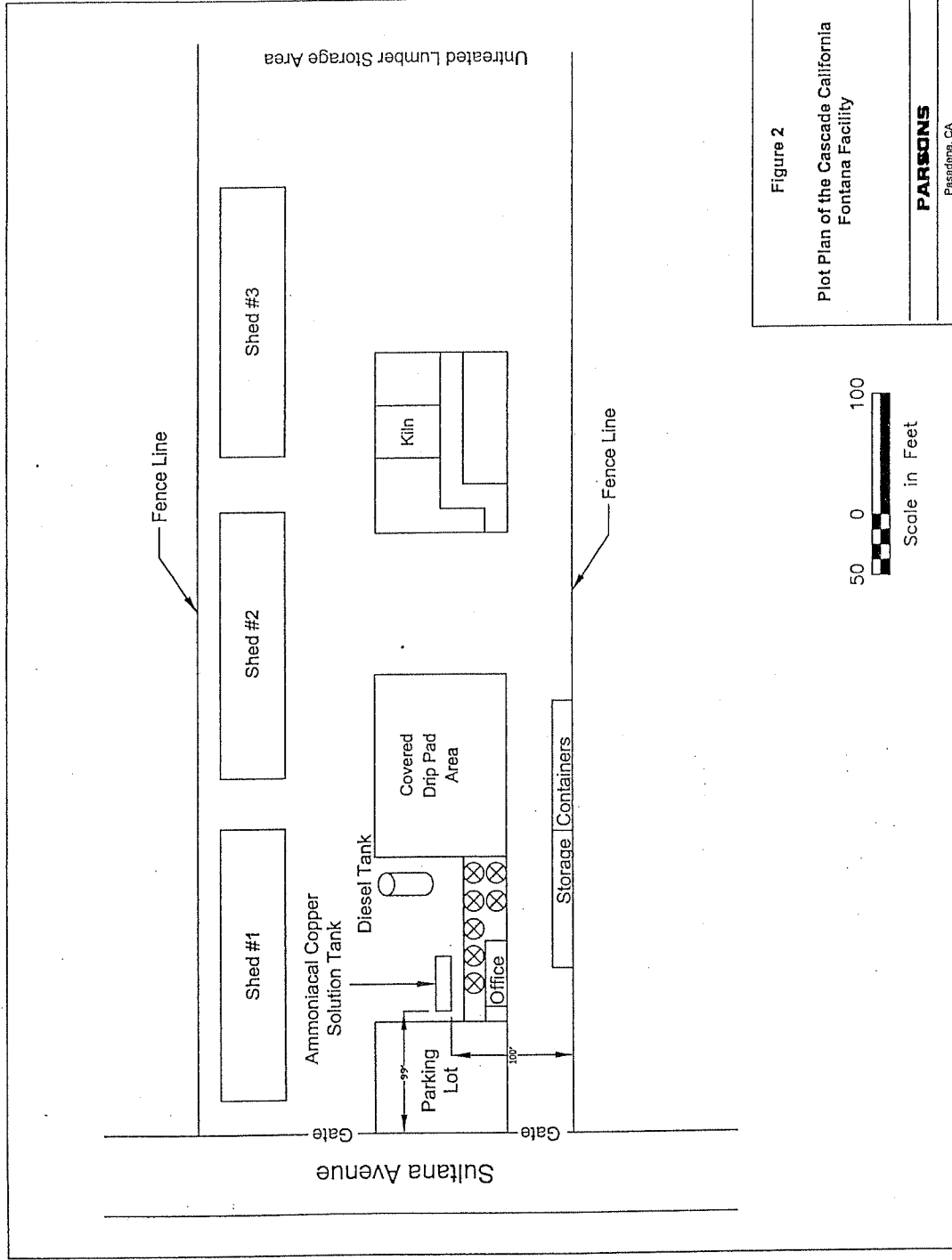


Figure 2
Plot Plan of the Cascade California
Fontana Facility

PARSONS
Pasadena, CA

K:\reports\R1440 (California Cascade)\figures\Figure 2.dwg

evening with low wind speeds. With increased turbulence, or lower stability of the atmosphere, the plume is diluted more rapidly and the distance to the toxic endpoint is shorter. Therefore, stability Class F and a wind speed of 1.5 m/s were chosen for the worst-case scenario to represent the conditions that result in the least amount of regulated substance dilution and farthest distance to the toxic endpoint.

RMPR allows for the use of other meteorological combinations of atmospheric stability and wind speed data, if at all times for the past 3 years, site-specific data displays a higher minimum wind speed or a less stable atmosphere. Since sufficient site-specific meteorological data were not available, the meteorological combination of atmospheric stability F and wind speed of 1.5 m/s, as suggested by RMPR, was used for performing the consequence analysis for the worst-case release scenario.

Ambient Temperature

RMPR for the worst-case release analysis require use of the highest daily maximum temperature in the previous three years, and average humidity. Since sufficient site-specific temperature data are not available, the highest temperature was identified from a review of the highest temperatures recorded at the Fontana station, and reported by the South Coast Air Quality Management District (SCAQMD) in their publication "A Climatological Air Quality Profile, California South Coast Air Basin, 1980." Fontana is the nearest station to the CC Fontana facility where long-term ambient temperature data is available. The highest daily temperature was identified as 117°F and used for the dispersion analysis for the worst-case release scenario.

Height of Release

RMPR requires that, for the worst-case release analysis, the release should be assumed to occur at ground level (0 feet). Accordingly, the worst-case release analysis was performed for this height of release.

Surface Roughness

RMPR requires that either urban or rural topography be used for performing the air dispersion analysis for the identified release scenarios. The rural and urban topographical conditions are characterized in the air dispersion models in terms of surface roughness. The rural condition, defined by RMPR as "no buildings in the immediate area and the terrain is generally flat and unobstructed" [Section 2750.2 (e)]. Urban terrain is characterized by numerous obstacles, including buildings or trees. In general, without encountering many rough surface features to create air turbulence, a regulated substance plume will travel a longer distance.

Area maps were reviewed and an inspection of the surrounding terrain and buildings was performed to select site-specific surface conditions. Since many buildings surround the existing CC Fontana facility, ammoniacal copper solution storage facility location was characterized as an urban area for air dispersion analysis.

Dense or Neutrally Buoyant Gases

RMPR requires that the models used for dispersion analysis should appropriately account for the density of the released gas. The ammonia cloud formed during the worst-case release scenario would be neutrally buoyant. United States Environmental Protection Agency (EPA) has developed various neutrally or positively buoyant atmospheric models for dispersion studies of gases with densities lower than or equal to ambient air density. The neutrally or positively buoyant models assume that the dispersion is the result of the turbulent motion that characterizes the atmospheric boundary layer. The presence of the pollutant is assumed not to affect the atmospheric flow patterns. The neutrally buoyant atmospheric models can be grouped under two categories, depending upon the release duration of the pollutant: (1) short-term (PUFF) release models, and (2) steady-state models for sources emitting continuously or for time periods equal to or greater than the travel time from the source to the point of interest.

For this air dispersion modeling study, EPA's SCREEN3, a steady state screening model was used. The results obtained using this model are expected to be conservative (higher concentrations). SCREEN3 is a Gaussian dispersion model applicable to continuous releases of non-reactive, non-dense gases that are emitted from point or area sources. The model provides maximum ground level concentrations and distances to the maximum concentration based on a pre-selected range of worst-case meteorological combinations. The wind speed and stability class combinations considered by the SCREEN3 model includes the EPA recommended default combination of wind speed of 1.5 m/s and atmospheric stability of F. The SCREEN3 model predicts one-hour average concentrations for the modeled pollutant.

Temperature of Released Substance

The maximum ambient temperature of 117°F was also used as the release temperature of the ammoniacal copper solution.

WORST-CASE RELEASE SCENARIO SELECTED FOR AIR DISPERSION MODELING STUDY

RMPR requires that a worst-case release scenario analysis be performed in compliance with specified conditions, as detailed below.

Number of Release Scenarios

RMPR requires the performance of a consequence analysis for one worst-case release scenario, estimated to create the greatest distance in any direction to a toxic endpoint. The worst-case release scenario selected was the crack/rupture of the ammoniacal copper solution filling pipe. This scenario was selected in consultation with the San Bernardino County Fire Department, the Administrative Agency for the CC Fontana facility during a site visit meeting on August 18, 2003. A tank rupture scenario was not considered because the spilled ammonical copper solution will be fully contained in the steel vault, which will be fully enclosed. The release of ammonia vapor from the steel vault will be minimal.

Worst-case Release Quantity

The worst-case scenario assumes that the entire contents of the ammoniacal copper solution contained in the filling pipe would be released, regardless of how improbable that may be. In addition, only “passive” mitigation methods such as buildings or dikes can be considered. Passive mitigation, as defined, requires no mechanical, electrical, or human input. The regulations require that the worst-case scenario assume atmospheric conditions that are conservative and result in large impact areas. A release of 5 pounds of ammonia present in the filling pipe represents the worst-case release quantity. It should be noted that the tank will be filled from the top; thus, there would be no backflow of ammoniacal solution from the tank in case of a crack/rupture in the fill line. This control is considered as a passive mitigation.

Worst-case Release Scenario for Toxic Liquids

For estimating the release rate of ammonia to the air it was assumed that all ammoniacal solution contained in the pipe would spread instantaneously to a depth of one centimeter in an undiked area. The release rate of ammonia to air was estimated using the area covered by the full release of ammoniacal solution and vapor pressure of 11% aqueous ammonia at the highest daily temperature of 117°F.

A summary of all the parameters selected for the consequence analysis is presented in Table 1. Details of the calculations are presented in Appendix A.

**Dispersion Model Summary Sheet for the
Worst-Case Release Scenario**

Input Parameter	Release Scenario: Tank De-Inventory Release
Ammonia Release Quantity (lb)	5
Release Rate from Undiked Area (lb/min)	0.42
Release Time (sec)	Instantaneous to the Pool
Physical State	Vapor
Release Direction	Ground
Release Temperature (°F)	117
Ambient Temperature (°F)	117
Stability Class	F
Wind Speed (m/s)	1.5
EPA Toxic Endpoint	200 ppm

Dispersion Modeling Results

The results of the SCREEN3 model analysis indicated that ammonia concentration of 200-ppm would not extend to the closest fence-line. The closest fence-line is at a distance of 100 feet (30 meters) and ammonia concentration at this distance was predicted at 124 ppm, which is lower than the ammonia toxic endpoint concentration of 200 ppm. The SCREEN3 model output printout is included in Appendix A.

CONCLUSIONS

As mentioned above, processes with no public receptors within the distance to the toxic endpoint from a worst-case release scenario, and no accidents with specific off-site consequences within the past five years are eligible for Program Level 1. Since the toxic endpoint distance for the worst-case release scenario would not extend beyond the CC Fontana facility fence-line and also because no accidental releases involving ammoniacal copper solution have occurred at the CC Fontana facility during the last five years, which would fall under the RMPR specified categories, the proposed ammoniacal copper solution storage and handling process would be eligible for Program Level 1 classification.

The RMPR specified accident categories include only those accidents, which must have caused at least one of the following:

- On-site deaths, injuries, or significant property damage; or
- Known offsite deaths, injuries, property damage, environmental damage, evacuations, or sheltering in place.

REFERENCES

- EPA, 1998. "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources," August.
- EPA, 1999. "EPA Risk Management Program Level Offsite Consequence Analysis Guidance," May.

Appendix A

A-1 Input Data – Worst-Case Release Scenario

A-2 SCREEN3 Model Output

A-3 Results of RMP*Comp Modeling

Appendix A-1

Input Data Worst-Case Release Scenario

APPENDIX A-1

INPUT DATA - WORST CASE RELEASE SCENARIO (2" DIAMETER PIPE RUPTURE - NW 200-C MIXTURE)

JOB NO: 440731
DATE: 8/31/2003
FILE: R1440\CascadeWorst Case.xls

BY: J. Lipscomb
CHECKED: Kelvin Lu

INPUT DATA

(1) Maximum Ambient Temperature	117 °F
(2) Diameter of Pipe Used to Fill NW 200-C Mixture in the Storage Tank	2 inch
(3) Length of Pipe Used to Fill NW 200-C Mixture in the Storage Tank	30 feet
(4) Release Height	0 m
(5) Molecular Weight of Ammonia	17.031 kg/kmol
(6) Wind Speed	1.5 m/sec
(7) Toxic Endpoint for Ammonia	200 ppm
(8) Highest Percentage of Aqueous Ammonia in NW 200-C Mixture	11 %
(9) Calculated Vapor Pressure of Aqueous Ammonia (11%) at 117°F	208.5 mmHg
(10) Depth of Pool Formed after Release of NW 200-C Mixture	1 cm
(11) Minimum Distance to Fence Line	30 m

**CALCULATIONS - WORST CASE RELEASE SCENARIO
(2" DIAMETER PIPE RUPTURE - NW 200-C MIXTURE)**

JOB NO: 440731
 DATE: 8/31/2003
 FILE: R1440\CascadeWorst Case.xls

BY: J. Lipscomb
 CHECKED: Kelvin Lu

CALCULATIONS - CALCULATION OF AMMONIA RELEASE PARAMETERS FOR THE WORST CASE RELEASE SCENARIO (RUPTURE OF NW 200-C FILLING PIPE)

Calculation of Volume of NW 200-C Mixture in the Pipe

- | | |
|---|------------------|
| (1) Diameter of Pipe Used to Fill NW 200-C Mixture in the Storage Tank | 2 inch |
| Diameter of Pipe Used to Fill NW 200-C Mixture in the Storage Tank in ft, D | 0.167 ft |
| (2) Length of Pipe Used to Fill NW 200-C Mixture in the Storage Tank, L | 30 feet |
| (3) Volume of NW 200-C Mixture in the Pipe, cubic feet | 0.657 cubic feet |
| = $L \times 3.14 \times (D \times D/4)$ cubic feet | |
| (4) Volume of NW 200-C Mixture in the Pipe, cubic centimeter, Vt | 18604 cubic cm |
| V = $0.657 \times 30.48 \times 30.48 \times 30.48$ | |

Calculation of Surface Area of Pool of NW 200-C Mixture (No Dike)

- | | |
|--|-----------------------|
| (5) Depth of the Pool, H | 1 cm |
| (6) Area of Pool in Square Centimeter , A | 18604 cm ² |
| = V/H | |
| (7) Area of Pool in Square Feet, A1 | 20.03 ft ² |
| = $A / (30.48 \times 30.48)$ | |
| (8) Area of Pool in Square Meter, A2 | 1.86 m ² |
| = $A / (100 \times 100)$ | |
| (8) Length and Width of a Square with Area A, cm | 136.4 cm |
| (9) Length and Width of a Square with Area A, m | 1.36 m |

**CALCULATIONS - WORST CASE RELEASE SCENARIO
(2" DIAMETER PIPE RUPTURE - NW 200-C MIXTURE)**

JOB NO: 440731
 DATE: 8/31/2003
 FILE: R1440\CascadeWorst Case.xls

BY: J. Lipscomb
 CHECKED: Kelvin Lu

**CALCULATIONS - CALCULATION OF AMMONIA RELEASE PARAMETERS FOR THE
 WORST CASE RELEASE SCENARIO (RUPTURE OF NW 200-C FILLING PIPE)**

Calculation of Ammonia Evaporation Rate from the Pool

- | | |
|---|-----------------------------|
| (10) Maximum Ambient Temperature, °F | 117 °F |
| Maximum Ambient Temperature, K, T | 320.4 K |
| $= [(F-32) \times 5/9] + 273.15$ | |
| (11) Vapor Pressure of 11% Aqueous Ammonia at 117 °F, VP | 208.5 mmHg |
| (See details on next page, 4) | |
| (12) Molecular Weight of Ammonia, MW | 17.031 lb/lb-mol |
| (13) Surface Wind Speed, U | 1.5 m/sec |
| (14) Constant in the Evaporation rate Equation, K | 0.0035 |
| (15) Release Rate in Pounds per Minute, QR | 0.42 lbs/min |
| $QR = (K \times U^{0.78} \times MW^{0.67} \times A1 \times VP)/T$ | |
| (16) Release Rate in g/sec | 3.175 g/sec |
| $= [0.42 \text{ (lbs/min)} \times (453.592 \text{ (g/lb)})] / 60 \text{ (sec)}$ | |
| (17) Release Rate per Unit Area of the Pool (g/ m ² -sec) | 1.71 g/ m ² -sec |
| $= 3.175 \text{ (g/sec)} / 1.86 \text{ m}^2$ | |

Calculation of Total Quantity of Ammonia Released, Qs

- | | |
|---|--------------------------|
| (18) Specific Gravity of Ammoniacal Copper Solution, SG | 1.2 |
| (19) Density of Water, p | 62.4 lbs/ft ³ |
| (20) Quantity of Ammoniacal Copper Solution Released, Qac | 49.2 lbs |
| $= p \times SG \times \text{Volume of Solution Released}$ | |
| (21) Total Quantity of Ammonia Released, Qs | 5 lbs |
| $= 0.11 \times Qac$ | |

Calculation of Vapor Pressure of 11% Aqueous Ammonia

The worst-case scenario analysis requires the use of vapor pressure at the maximum ambient temperature of 117°F. Vapor pressure of 11% aqueous ammonia at 117°F was estimated in two steps. In the first step, vapor pressure at 77°F was estimated by extrapolating the vapor pressure provided at a wind speed of 1.5 m/sec for aqueous ammonia concentrations at 20%, 24% and 30% in the Risk Management Program Guidance for Offsite Consequence Analysis, page B-7 (EPA 550-B-99-009). Figure A-1 shows the curve fitted using the aqueous ammonia initial concentration and vapor pressure for wind speed of 1.5 m/sec.

Using Figure A-1, the vapor pressure of aqueous ammonia at 77°F was estimated at 115.81 mmHg. In step 2, a correction factor was calculated using the results of RMP*Comp runs for 20%, 24% and 30% aqueous ammonia solutions at 77°F and 117°F. The emission rate estimated by RMP*Comp model is directly proportional to the vapor pressure. Thus, the ratio of emission rates at 117°F and 77°F is expected to provide the correction factor which could be used for calculating the vapor pressure at higher temperature when the vapor pressure at a lower temperature is available. The highest value of this ratio of 1.8 (for the three aqueous ammonia concentrations) obtained from RMP*Comp model run was used to estimate the vapor pressure of 11% aqueous ammonia at 117°F. The vapor pressure at 117°F was estimated at 208.5 mmHg (1.8 x 115.81).

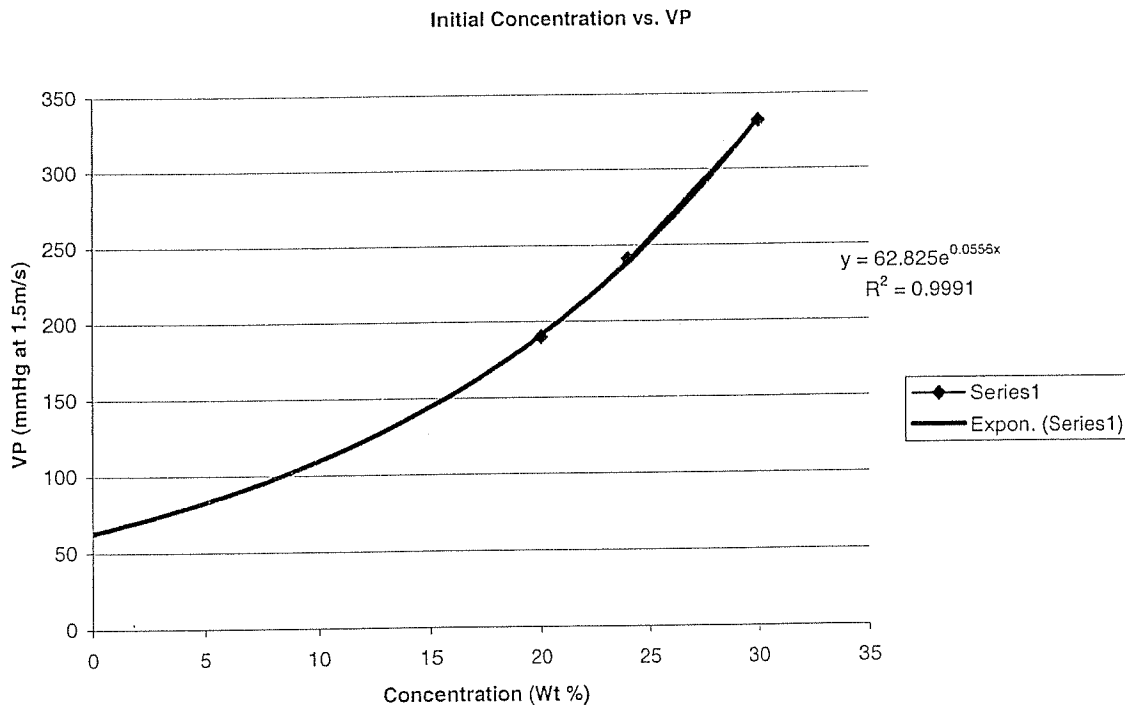


Figure A-1: Initial Concentration vs. Vapor Pressure

SCREEN3 MODELING PARAMETERS

JOB NO: 440731
DATE: 8/31/2003
FILE: R1440\CascadeWorst Case.xls

BY: J. Lipscomb
CHECKED: Kelvin Lu

(1) Ambient Temperature	320.4 K
(2) Length of Each Side of a Square Pool	1.36 m
(3) Ammonia Emission Rate	1.71 g/(m ² s)
(4) Height of release	0.0 m
(5) Gas molecular weight	17.031 kg/kmol
(6) Toxic Endpoint of Ammonia	200 ppm
(7) Minimum Distance to Fence Line	30 m

MODEL RESULTS - WORST CASE RELEASE SCENARIO
(2" DIAMETER PIPE RUPTURE - NW 200-C MIXTURE)

JOB NO: 440731
DATE: 9/8/2003
FILE: R1440\CascadeWorst Case.xls

BY: J. Lipscomb
CHECKED: Kelvin Lu

SCREEN3 MODEL RESULTS

- | | |
|---|-----------------------------|
| (1) Maximum Ammonia Concentration from SCREEN 3 Model Run, Cmax | 8.657E+04 ug/m ³ |
| (2) Molecular Weight of Ammonia, MW | 17.031 g/g-mol |
| (4) Conversion of Ammonia Concentration to ppm, MV | 124 ppm |
- = Cmax x 0.02445/ MW

Appendix A-2

SCREEN3 Model Output

09/10/03
09:29:42

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

Release of NW 200-C Mixture Containing 11% of Ammonia - Cascade Facility

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA
EMISSION RATE (G/(S-M**2)) = 1.71000
SOURCE HEIGHT (M) = .0000
LENGTH OF LARGER SIDE (M) = 1.3600
LENGTH OF SMALLER SIDE (M) = 1.3600
RECEPTOR HEIGHT (M) = .0000
URBAN/RURAL OPTION = URBAN
THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = .000 M**4/S**3; MOM. FLUX = .000 M**4/S**2.

*** STABILITY CLASS 5 ONLY ***
*** ANEMOMETER HEIGHT WIND SPEED OF 1.50 M/S ONLY ***

*** SCREEN DISCRETE DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	.1237E+06	5	1.5	1.5	10000.0	.00	36.
30.	.8657E+05	5	1.5	1.5	10000.0	.00	5.

*** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	.1237E+06	25.	0.

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

Appendix A-3

Results of RMP*Comp Modeling
(To estimate the correction factor for vapor pressure for a
temperature of 117°F)

RMP*Comp Ver. 1.07
Results of Consequence Analysis

Chemical: Ammonia (water solution) 20%
CAS #: 7664-41-7
Category: Toxic Liquid
Scenario: Worst-case
Quantity Released: 1000 gallons
Liquid Temperature: 77 F

Mitigation Measures: NONE
Release Rate to Outside Air: 85.1 pounds per minute
Topography: Urban surroundings (many obstacles in the immediate area)
Toxic Endpoint: 0.14 mg/L; basis: ERPG-2
Estimated Distance to Toxic Endpoint: 0.2 miles (0.3 kilometers)

-----Assumptions About This Scenario-----
Wind Speed: 1.5 meters/second (3.4 miles/hour)
Stability Class: F
Air Temperature: 77 degrees F (25 degrees C)

Ratio of release rate at 117°F (153 lbs/min)
and at 77°F (85.1 lbs/min) = $153/85.1 = 1.8$

Note: The ratio of 1.8 for 20% solution is the highest of the three solutions
(20%, 24%, and 30%) modeled.

RMP*Comp Ver. 1.07
Results of Consequence Analysis

Chemical: Ammonia (water solution) 20%
CAS #: 7664-41-7
Category: Toxic Liquid
Scenario: Worst-case
Quantity Released: 1000 gallons
Release Duration: 10 min
Release Rate: 153 pounds per min
Liquid Temperature: 117 F

Mitigation Measures: NONE
Topography: Urban surroundings (many obstacles in the immediate area)
Toxic Endpoint: 0.14 mg/L; basis: ERPG-2
Estimated Distance to Toxic Endpoint: 0.2 miles (0.3 kilometers)

-----Assumptions About This Scenario-----
Wind Speed: 1.5 meters/second (3.4 miles/hour)
Stability Class: F
Air Temperature: 77 degrees F (25 degrees C)

RMP*Comp Ver. 1.07
Results of Consequence Analysis

Chemical: Ammonia (water solution) 24%
CAS #: 7664-41-7
Category: Toxic Liquid
Scenario: Worst-case
Quantity Released: 1000 gallons
Liquid Temperature: 77 F

Mitigation Measures: NONE
Release Rate to Outside Air: 108 pounds per minute
Topography: Urban surroundings (many obstacles in the immediate area)
Toxic Endpoint: 0.14 mg/L; basis: ERPG-2
Estimated Distance to Toxic Endpoint: 0.2 miles (0.3 kilometers)

-----Assumptions About This Scenario-----
Wind Speed: 1.5 meters/second (3.4 miles/hour)
Stability Class: F
Air Temperature: 77 degrees F (25 degrees C)

Ratio of release rate at 117°F (180 lbs/min)
and at 77°F (108 lbs/min) = $180/108 = 1.7$

RMP*Comp Ver. 1.07

Results of Consequence Analysis

Chemical: Ammonia (water solution) 24%

CAS #: 7664-41-7

Category: Toxic Liquid

Scenario: Worst-case

Quantity Released: 1000 gallons

Release Duration: 10 min

Release Rate: 180 pounds per min

Liquid Temperature: 117 F

Mitigation Measures: NONE

Topography: Urban surroundings (many obstacles in the immediate area)

Toxic Endpoint: 0.14 mg/L; basis: ERPG-2

Estimated Distance to Toxic Endpoint: 0.3 miles (0.5 kilometers)

-----Assumptions About This Scenario-----

Wind Speed: 1.5 meters/second (3.4 miles/hour)

Stability Class: F

Air Temperature: 77 degrees F (25 degrees C)

RMP*Comp Ver. 1.07
Results of Consequence Analysis

Chemical: Ammonia (water solution) 30%
CAS #: 7664-41-7
Category: Toxic Liquid
Scenario: Worst-case
Quantity Released: 1000 gallons
Liquid Temperature: 77 F

Mitigation Measures: NONE
Release Rate to Outside Air: 147 pounds per minute
Topography: Urban surroundings (many obstacles in the immediate area)
Toxic Endpoint: 0.14 mg/L; basis: ERPG-2
Estimated Distance to Toxic Endpoint: 0.2 miles (0.3 kilometers)

-----Assumptions About This Scenario-----
Wind Speed: 1.5 meters/second (3.4 miles/hour)
Stability Class: F
Air Temperature: 77 degrees F (25 degrees C)

Ratio of release rate at 117°F (221 lbs/min)
and at 77°F (147 lbs/min) = $221/147 = 1.5$

RMP*Comp Ver. 1.07
Results of Consequence Analysis

Chemical: Ammonia (water solution) 30%
CAS #: 7664-41-7
Category: Toxic Liquid
Scenario: Worst-case
Quantity Released: 1000 gallons
Release Duration: 10 min
Release Rate: 221 pounds per min
Liquid Temperature: 117 F

Mitigation Measures: NONE
Topography: Urban surroundings (many obstacles in the immediate area)
Toxic Endpoint: 0.14 mg/L; basis: ERPG-2
Estimated Distance to Toxic Endpoint: 0.3 miles (0.5 kilometers)

-----Assumptions About This Scenario-----
Wind Speed: 1.5 meters/second (3.4 miles/hour)
Stability Class: F
Air Temperature: 77 degrees F (25 degrees C)



CUPA

San Bernardino County Fire Department • Hazardous Materials Division
620 South "E" Street, San Bernardino, CA 92415-0153 • PHONE: (909) 386-8401 FAX: (909) 386-8460

BUSINESS EMERGENCY/CONTINGENCY PLAN COVER SHEET

I. IDENTIFICATION

ESTABLISHMENT # [redacted] For Dept Use Only - Log In/Date Stamp
FACILITY ID # 3 6 [redacted] 0 0 1 [redacted]
BUSINESS NAME (Same as FACILITY NAME or DBA) 3
California Cascade Fontana, Inc.
BUSINESS SITE ADDRESS 8395 Sultana Avenue CITY Fontana ZIPCODE 92335

II. SUBMISSION CHECKLIST

(Complete this Section if submitting an entire business emergency/contingency plan whether new or revised)

- Submission Checklist | Items with an '*' are considered "Inventory" under State disclosure laws
* Business Activities Form
* Business Owner/Operator Identification Form
* Supplemental Emergency Contact Page
Emergency Response Plans and Procedures
* Hazardous Materials Inventory Summary Form for the facility listing materials (including wastes) by item number.
* One Hazardous Materials Inventory Form for each hazardous material (including wastes) which meet reporting criteria
* Material Safety Data Sheets attached to the inventory form of each material not listed in Appendix I.
* Facility map (using grid form provided) consisting of all required features including the location of each inventoried item.
Site map (using grid form provided) consisting of all required features including surrounding facilities and areas.
Area map - photocopied city map with location of site indicated
Owner/Operator has signed and dated the plan and all required individual pages of the plan.
Submit 2 copies to the Hazardous Materials Division. One is for distribution to the local fire jurisdiction.
Retain one copy of the business emergency/contingency at the facility.

III. UPDATE/CERTIFICATION

(Complete this Section if submitting a partial update or re-certifying an existing Plan)

Check the appropriate boxes below and sign the certification statement. Submit 2 copies of all update information.

- [checked] Please incorporate the following into my business emergency/contingency plan.
[] New Business Owner/Operator Identification Form
[] New Inventory Forms and new Inventory Summary Form (and maps, if affected).
[] New Supplemental Emergency Contact Page.
[] Other: _____

Brief explanation of changes: _____

- [] There have been no changes to the inventory. In place of submitting the annual inventory, I hereby attest to all of the following:
• The information contained in the inventory most recently submitted to the CUPA is complete, accurate and up to date.
• There has been no change in the quantity, storage, or handling of hazardous materials (including waste) reported in the most recently submitted inventory.
• No hazardous materials (including waste) subject to inventory requirements are being handled that are not listed on the most recently submitted inventory.
• This certification is not being made to meet annual inventory submission requirements of EPCRA. (EPCRA requires complete annual submission)

IV. SIGNATURE

(Complete this Section for all submissions)

Certification - Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and believe the information is true, accurate and complete.

SIGNATURE OF OWNER/OPERATOR DATE NAME OF DOCUMENT PREPARER Richard Armstrong, PhD, PE ENGEO Incorporated
NAME OF SIGNER (print) TITLE OF SIGNER (print)



CUPA

San Bernardino County Fire Department • Hazardous Materials Division
 620 South "E", San Bernardino, CA 92415-0153 • (909) 386-8401 FAX (909) 386-8460

BUSINESS ACTIVITIES

I. FACILITY IDENTIFICATION

FACILITY ID #	3	6	0	0	1						EPA ID # (Hazardous Waste Only)
BUSINESS NAME (Same as FACILITY NAME or DBA)											
California Cascade Fontana, Inc.											
BUSINESS ADDRESS									CITY		ZIP CODE
8395 Sultana Avenue									Fontana		92335

II. ACTIVITIES DECLARATION

Does your facility...	If YES, please complete these portions of the application...		
A. HAZARDOUS MATERIALS Have onsite (for any purpose) hazardous materials at or above 55 gallons for liquids, 500 pounds for solids or 200 cubic feet for compressed gases; or the applicable Federal threshold quantity for an extremely hazardous substance; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70; or handle ANY amount of Class 1 or 2 explosives; or ANY amount Category I or II pesticides.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> BUSINESS EMERGENCY/CONTINGENCY PLAN (Used in place of OES Form 2730 and 2731)
B. REGULATED SUBSTANCES Have Regulated Substances stored onsite in quantities greater than the threshold planning quantities established by the California Accidental Release Prevention Program (CalARP)?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> BUSINESS EMERGENCY/CONTINGENCY PLAN (Used in place of OES Form 2730 and 2731) <input checked="" type="checkbox"/> CalARP REGISTRATION FORM
C. UNDERGROUND STORAGE TANKS (USTs) 1. Own or operate underground storage tanks?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> UST FACILITY <input checked="" type="checkbox"/> UST TANK (Pages 1 and 2) (One set per tank)
2. Intend to upgrade existing or install new USTs?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> UST FACILITY <input checked="" type="checkbox"/> UST TANK (Pages 1 and 2) (One set per tank) <input checked="" type="checkbox"/> UST INSTALLATION – CERTIFICATE OF COMPLIANCE (one page per tank)
3. Need to report closing a UST?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> UST FACILITY <input checked="" type="checkbox"/> UST TANK (Pages 1 and 2) (One set per tank) <input checked="" type="checkbox"/> HAZARDOUS WASTE TANK CLOSURE CERTIFICATION
D. ABOVE GROUND PETROLEUM STORAGE TANKS (ASTs) Own or operate ASTs above these thresholds: • Any tank capacity is greater than 660 gallons, or • The total capacity for the facility is greater than 1,320 gallons?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> IF YOU ANSWERED YES, PREPARE AND MAINTAIN A SPCC PLAN AS PART OF YOUR CONTINGENCY PLAN TO ADDRESS OIL SPILLS AND RELEASES FROM THE ASTs AT YOUR FACILITY.
E. HAZARDOUS WASTE 1. Generate ANY amount of hazardous waste?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> EPA ID NUMBER---provide at the top of this page <input checked="" type="checkbox"/> BUSINESS EMERGENCY/CONTINGENCY PLAN (Used in place of OES Form 2730 and 2731)
2. Recycle more than 100 kg/month of excluded or exempted recyclable materials (per CHSC §25143.2)?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> RECYCLABLE MATERIALS REPORT (one per recycler)
3. Treat hazardous waste on site?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> ONSITE HAZARDOUS WASTE TREATMENT - FACILITY (Formerly DTSC Form 1772) <input checked="" type="checkbox"/> ONSITE HAZARDOUS WASTE TREATMENT - UNIT (one page per unit) (Formerly DTSC Forms 1772A, B, C and L)
4. Treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> CERTIFICATION OF FINANCIAL ASSURANCE (Formerly DTSC Form 1232)
5. Consolidated hazardous waste generated at a remote site?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> REMOTE WASTE / CONSOLIDATED SITE ANNUAL NOTIFICATION (Formerly DTSC Form 1196)



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BUSINESS OWNER / OPERATOR IDENTIFICATION

ESTABLISHMENT #: (This number is on your CUPA permit.)
FACILITY ID #: 3 6 0 0 1 1 (The empty boxes are the last 6 digits of the above Establishment #.)
EFFECTIVE DATE: 12-1-03 ENDING DATE:
BUSINESS NAME (Same as FACILITY NAME or DBA): California Cascade Fontana, Inc. BUSINESS PHONE: (909) 357-2136
BUSINESS SITE ADDRESS: 8395 Sultana Avenue
CITY: Fontana COUNTY: SAN BERNARDINO STATE: CA ZIP CODE: 92335
D&B NUMBER: PRIMARY SIC/NAICS CODE: 2491 DESCRIPTION OF BUSINESS ACTIVITY FOR THIS PRIMARY SIC CODE: Wood Treating Facility
BUSINESS OPERATOR NAME: California Cascade Fontana, Inc. BUSINESS OPERATOR PHONE: (909) 357-2136

II. BUSINESS OWNER

OWNER NAME: Hank Feenstra OWNER PHONE: (916) 736-3353
OWNER MAILING ADDRESS: P.O. Box 430026
CITY: Sacramento STATE: CA ZIP CODE: 95853

III. ENVIRONMENTAL CONTACT

CONTACT NAME: Robert Veberroth CONTACT PHONE: (909) 681-1240
CONTACT MAILING ADDRESS: 8395 Sultana Avenue
CITY: Fontana STATE: CA ZIP CODE: 92335

- PRIMARY -

IV. EMERGENCY CONTACTS*

- SECONDARY -

NAME: Robert Veberroth TITLE: Plant Manager BUSINESS PHONE: (909) 357-2136 HOME PHONE: (909) 681-1240 OTHER 24-HOUR PHONE: (909) 319-9824 PAGER/CELL #: (909) 319-9824
NAME: Joe Ayala TITLE: Emergency Coordinator BUSINESS PHONE: (909) 357-2136 HOME PHONE: (909) 798-4766 OTHER 24-HOUR PHONE: 24-HOUR PHONE (NOT CONFIDENTIAL - SEE NOTE BELOW) PAGER/CELL #: PAGER/CELL #

*HOME PHONE NUMBERS ARE REQUIRED FOR ALL HAZARDOUS WASTE GENERATORS. IF YOU WISH TO KEEP 24-HOUR OR HOME PHONE NUMBERS CONFIDENTIAL, FILE THE CONFIDENTIAL EMERGENCY CONTACT PAGE (PAGE 3) AND LEAVE THE ABOVE 24 HR FIELDS BLANK. ALSO USE THE SEPARATE PAGE (PAGE 3) TO DESIGNATE MORE THAN 2 EMERGENCY COORDINATORS.

V. SIGNATURE

SIGNATURE OF OWNER/OPERATOR: NAME OF SIGNER (print): DATE:



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LOCALLY COLLECTED INVENTORY INFORMATION

I. FACILITY IDENTIFICATION

ESTABLISHMENT #: (This number is on your CUPA permit.)
FACILITY ID #: 3 6 0 0 1 (The empty boxes are the last 6 digits of the above Establishment #.)

BUSINESS NAME (Same as FACILITY NAME or DBA)

California Cascade Fontana, Inc.

FACILITY ADDRESS

8395 Sultana Avenue

CITY

Fontana

II. ADDITIONAL CONTACT & OPERATIONS INFORMATION

BUSINESS MAILING ADDRESS: 8395 Sultana Avenue; CITY: Fontana; STATE: CA; ZIP CODE: 92335
BUSINESS FAX NUMBER: (909) 357-2268; BUSINESS E-MAIL:

NOTE: ALL CORRESPONDENCE, INVOICES, PERMITS, AND NOTICES WILL BE SENT TO THE ABOVE ADDRESS

Total # of Employees onsite/shift: (as reported on your most recent tax withholding forms.)
SHIFT 1: 27; SHIFT 2: 13; SHIFT 3: 0; HOURS OF OPERATION: 0700-2400
Total # of employees onsite involved in the operation that uses hazardous materials: 8; TAXPAYER ID NUMBER: 68-0149017

ASSESSORS PARCEL NUMBER (S): 0232-051-10-0000; CROSS STREET: Arrow Route

BUSINESS DESCRIPTION: Wood preserving

Number of Underground Storage Tanks located at this facility: 0

Does this facility:

- Store liquid petroleum (not petroleum gases) in a single aboveground tank greater than 660 gallons? [X] YES [] NO
Have a cumulative aboveground liquid petroleum (not including petroleum gases) storage capacity of greater than 1320 gallons? [X] YES [] NO
Store or handle extremely hazardous substances at a quantity above threshold planning quantity? [] YES [X] NO
Is this site subject to EPCRA section 311 & 312 (Emergency Planning and Community Right-to-Know Act)? [X] YES [] NO
Store or handle Regulated Substances (see Appendix C) in excess of threshold quantity? [X] YES [] NO

Name(s) of Regulated Substances:

Ammonia (aqueous)

Does this facility have a laboratory on site [] YES* [X] NO

* If yes, attach a general description of the laboratory and a brief description of the type(s) and quantity of hazardous materials in the lab.

III. VULNERABLE POPULATIONS

Is there a school, hospital, or extended care facility within 1,000 ft. (straight-line distance) of this facility? [] YES [X] NO

If yes, provide name and address of each school hospital or extended care facility site (Use a separate page if needed):

Date: August 25, 2003



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BUSINESS NAME (Same as FACILITY NAME or DBA) California Cascade Fontana, Inc.	
FACILITY ADDRESS 8395 Sultana Avenue	CITY Fontana

EMERGENCY CONTACTS

A business shall appoint an Emergency Coordinator and Alternate Emergency Coordinator. These persons shall be knowledgeable in all aspects of the business operation. In the event of a release or threatened release of hazardous materials, the Emergency Coordinators shall be responsible for initiating response actions by the business. The Emergency Coordinators shall have full access to the facility, site familiarity and authority to make decisions for the business and to commit business resources. Hazardous waste generators must provide the information required in Title 22 of the California Code of Regulations and must list all emergency coordinators in the order that they will assume responsibility.

ONLY Emergency Contacts listed on this separate page will be held as confidential.

NAME Hank Feenstra	TITLE Owner	
OFFICE ADDRESS P.O. Box 430026, Sacramento, CA 95853		
OFFICE PHONE (916) 736-3353	HOME PHONE None	OTHER 24 HR PHONE (PAGER/CELL) (916) 849-9996

NAME Robert Veberroth	TITLE Plant Manager	
OFFICE ADDRESS 8395 Sultana Avenue, Fontana, CA 92335		
OFFICE PHONE (909) 357-2136	HOME PHONE (909) 681-1240	OTHER 24 HR PHONE (PAGER/CELL) (909) 319-9824

NAME Joe Ayala	TITLE Emergency Coordinator	
OFFICE ADDRESS 8395 Sultana Avenue, Fontana, CA 92335		
OFFICE PHONE (909) 357-2136	HOME PHONE (909) 798-4766	OTHER 24 HR PHONE (PAGER/CELL) N/A

EMERGENCY RESPONSE TEAM (OWN EMPLOYEES OR CONTRACT) -IF APPLICABLE

NAME Robert Veberroth	24-HOUR PHONE (909) 319-9824
NAME Joe Ayala	24-HOUR PHONE (909) 798-4766
NAME Harvey Molatore	24-HOUR PHONE (916) 417-6504
NAME Fred Garcia	24-HOUR PHONE (909) 319-9822

Date: August 25, 2003



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BUSINESS NAME (Same as FACILITY NAME or DBA)
California Cascade Fontana, Inc.
FACILITY ADDRESS 8395 Sultana Avenue CITY Fontana
EMERGENCY RESPONSE PLANS & PROCEDURES - AGENCY NOTIFICATION
POST BY PHONE

Agency Notification: A handler of hazardous materials is required to immediately report any release or threatened release of a hazardous material to the administering agency and the Office of Emergency Services. Note that there is no reportable quantity under California statute. Spills exceeding federal reportable quantities require notification to the National Response Center. This CUPA requires a written report within 15 days after any reportable release or threatened release. Contact the CUPA for further guidance.

If a situation is an emergency, call 911 first. (* Indicates mandatory notification.)

Agency

Phone Number

- 1. *Local Emergency Response Agency (if an emergency) 911
2. *San Bernardino County Fire Department Hazardous Materials Division (800) 33-TOXIC or (909) 386-8425
3. *State of California, Office of Emergency Services (800) 852-7550 or (916) 845-8911
4. National Response Center (800) 424-8802
5. Other Agencies (Cal OSHA, Regional Board, Air Quality, as applicable)

Table with 2 columns: Agency Name and Phone Number. Rows include US Coast Guard, National Response Center; Department of Environmental Health, San Bernadino County; South Coast Air Quality Management District.

EMERGENCY INFORMATION REQUIRED:

- Name & phone number of person reporting
Name and street address of the business
Location of the incident or threatened release
Type of incident or threatened release
Hazardous materials involved & physical state
Hazards to human health and/or environment
Estimate of the quantity released
Media (soil, water, air) into which release occurred
Precautions to take (if known)
Time and duration of the release
Is the chemical an extremely hazardous substance?
Extent of injuries, if any

Release reporting citations (California Health and Safety Code):

§ 25501. Definitions:

(r) "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, unless permitted or authorized by a regulatory agency.

(u) "Threatened release," means a condition creating a substantial probability of harm, when the probability and potential extent of harm make it reasonably necessary to take immediate action to prevent, reduce, or mitigate damages to persons, property, or the environment.

§ 25507(a) ... the handler or any employee, authorized representative, agent, or designee of a handler shall, upon discovery, immediately report any release or threatened release of a hazardous material to the administering agency, and to the office, in accordance with the regulations adopted pursuant to Section 25503. Each handler and any employee, authorized representative, agent, or designee of a handler shall provide all state, city, or county fire or public health or safety personnel and emergency rescue personnel with access to the handler's facilities.

§ 25515. Any person or business that violates Section 25507 shall, upon conviction, be punished by a fine of not more than twenty-five thousand dollars (\$25,000) for each day of violation, or by imprisonment in the county jail for not more than one year, or by both the fine and imprisonment. Furthermore, if the violation results in, or significantly contributes to, an emergency, including a fire, to which the county or city is required to respond, the person shall also be assessed the full cost of the county or city emergency response, as well as the cost of cleaning up and disposing of the hazardous materials.



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BUSINESS NAME (Same as FACILITY NAME or DBA)
California Cascade Fontana, Inc.

FACILITY ADDRESS CITY
8395 Sultana Avenue Fontana

EMERGENCY RESPONSE PLANS AND PROCEDURES

State Law requires your business to complete all sections of the Emergency Response Procedure listed below:

For each of the following, briefly describe your business's standard operating procedures relating to the release or threatened release of hazardous materials located at your facility. You may attach additional pages if necessary, but do not include copies of facility manuals unless requested to do so by this Department. You may reference manuals that are used by your facility for these procedures, but you must still give a brief description of policy.

EVACUATION/NOTIFICATION: Indicate location(s) where employees, customers, visitors or others on site are to evacuate in an emergency. Describe how your business will immediately notify people and evacuate the facility in the event of a release or threatened release of hazardous materials. Include the route and meeting place.

The evacuation location is the Sultana Avenue gate at the front of the site. Notification would occur by voice and/or 2-way radio.

PREVENTION/MITIGATION/ABATEMENT: Describe what policies and procedures your business will follow to prevent, reduce and/or remove the hazard to persons, property or the environment caused by a release or threatened release of hazardous materials and/or hazardous wastes. (Check those items that apply and write additional information in the space provided).

- Reduction of containers on site if not used or needed.
Containers are properly labeled and closed when not in use.
Compressed gas cylinders are properly secured.
Use of monitoring system. Type:
[X] Other:

A single 10,000 gallon tank holds the only hazardous substance. This tank is within a secondary containment structure.



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BUSINESS NAME (Same as FACILITY NAME or DBA) California Cascade Fontana, Inc.	
FACILITY ADDRESS 8395 Sultana Avenue	CITY Fontana

EMERGENCY RESPONSE PLANS AND PROCEDURES – PAGE 2

FACILITY TRAINING PLAN: Describe employee and operator training including local emergency response coordination, use of facility emergency equipment, and provisions for initial and refresher training. In addition, describe training for hazardous materials/waste handling as required by OSHA. (✓ Check those items that apply and write additional information in the space provided)

- New employee training.
- Annual training & periodic refresher courses.
- Familiarization with the Emergency Response Plans and Procedures of this Business Plan.
- Spill control equipment
- Monitoring system
- Personal Protective Equipment
- On the job training. Describe below.
- Other:

Monthly safety training program is compulsory for all employees.

EMERGENCY PROCEDURES: Give duties of the Emergency Coordinator and how implementation of Facility Emergency Response will be accomplished. (e.g. Notification, evacuation, emergency coordination) (✓ Check those items that apply and write additional information in the space provided)

Emergency Coordinator will:

- Identify potential hazards and determine whether a release has occurred.
- Activate local emergency systems (e.g. manual shutoff devices) and take appropriate immediate actions based on level of training and the ability to act safely.
- Coordinate the notification and evacuation of employees and customers from the facility.
- Make required agency notifications and request needed assistance.
- Assist responding agencies by providing access to the facility and information about the facility.
- Other:



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BUSINESS NAME (Same as FACILITY NAME or DBA)

California Cascade Fontana, Inc.

FACILITY ADDRESS

8395 Sultana Avenue

CITY

Fontana

EMERGENCY RESPONSE PLANS AND PROCEDURES - PAGE 3

FACILITY EMERGENCY EQUIPMENT: List facility emergency equipment on site (fire extinguisher, fire alarms, spill control equipment, SCBA, first aid kits, etc.); include test/maintenance plan. (Check those items that apply and write additional information in the space provided)

Table with 3 columns: Equipment, Quantity/Type, Maintenance Schedule/Frequency. Rows include Fire extinguisher(s), First aid kit(s), Fire alarm(s), Spill control equipment, Monitoring system, Personal Protective Equipment, Fire Hydrants.

FACILITY EARTHQUAKE RESPONSE: Identify areas of the facility as well as mechanical or other systems that require immediate inspection due of their vulnerability to earthquake related ground motion. (E.g. Hazardous materials or waste storage locations, vessels, piping, pipe and tank supports, valves, gauges, etc.) (Check those items that apply and write additional information in the space provided)

- Chemical Storage Locations - Product and Waste
Process vessels
Aboveground storage tanks
Emergency shutoff systems
Piping and pipe supports
Utility connections
Process Drip Pad

ARRANGEMENTS/AGREEMENTS: Describe any arrangements or agreements that you have with private emergency response teams, waste haulers, disposal companies, recyclers, local hospitals, police or fire. If you have no arrangements or agreements, state that fact in the space provided. (Check those items that apply and write additional information in the space provided)

- Hazardous waste hauler
Emergency response team
Local Hospitals
Other:
No arrangements or agreements at this time

Date: August 25, 2003



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620 South "E" Street, San Bernardino, CA 92415-0153 • PHONE: (909) 386-8401 FAX: (909) 386-8460

INVENTORY SUMMARY FORM (REQUIRED)

I. FACILITY IDENTIFICATION

ESTABLISHMENT #: [redacted] (This number is on your CUPA permit.)
FACILITY ID # 3 6 0 0 1 [redacted] 1 (The empty boxes are the last 6 digits of the above Establishment #.)
BUSINESS NAME (Same as FACILITY NAME or DBA)
California Cascade Fontana, Inc.
FACILITY ADDRESS 8395 Sultana Avenue CITY Fontana

II. INVENTORY SUMMARY

Table with 5 columns: Item #, Name of Hazardous Material or Waste, Maximum Quantity, Size of Largest Container, Unit of Measure. Includes example row for Lubricating Oil and rows for NW100 Copper ethanolamine solution, NW200 Copper aqueous ammonia solution, Carbo NT, and Diesel.

Summarize the business plan inventory on this page. Place this summary in front of inventory section of the Business Plan. Make copies of this sheet as necessary. Reminder: You need not report hazardous materials with a maximum quantity of less than 55 gallons, 500 pounds, or 200 cubic feet. However, hazardous wastes, Category 1 and 2 pesticides, and explosives are reportable at any quantity.

III. SIGNATURE- EPCRA Facilities: Also sign the bottom of each individual attached inventory form.

SIGNATURE OF OWNER/OPERATOR NAME OF SIGNER (print) DATE



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HAZARDOUS MATERIALS INVENTORY FORM - Chemical Description

One page per item. Indicate if material OR waste (Do not combine materials and wastes on one form)

MATERIAL [X]
WASTE []

MAKE COPIES OF THIS FORM AS NEEDED.
ATTACH A MATERIAL SAFETY DATA SHEET (MSDS) IF THE MATERIAL IS NOT LISTED IN APPENDIX I OF THIS GUIDE.

I. FACILITY INFORMATION

ESTABLISHMENT # [redacted] ITEM NUMBER [redacted]
FACILITY ID # 3 6 0 0 1 FACILITY MAP # 203 GRID COORDINATE(s) [redacted]
BUSINESS NAME California Cascade Fontana, Inc.
BUSINESS SITE ADDRESS 8395 Sultana Avenue, Fontana, CA 92335

II. CHEMICAL INFORMATION

CHEMICAL NAME 205 Diesel TRADE SECRET? [X] NO 206
COMMON NAME 207 Diesel EHS* [] YES [X] NO 208
CAS# 209 None EHS = Extremely Hazardous Substance (Appendix B)
HAZARDOUS MATERIAL TYPE [] a. PURE [X] b. MIXTURE [] c. WASTE 211 RADIOACTIVE? Yes [] No [X] CURIOS 213
PHYSICAL STATE [] a. SOLID [X] b. LIQUID [] c. GAS [] d. DUST LARGEST CONTAINER SIZE: 3,000 Gallon 215
FEDERAL HAZARD CATEGORIES [X] a. FIRE [] b. REACTIVE [] c. PRESSURE RELEASE [] d. ACUTE HEALTH [] e. CHRONIC HEALTH 216
AVERAGE AMOUNT 3,000 Gallon 217 MAXIMUM AMOUNT 3,000 Gallon 218 ANNUAL WASTE AMOUNT 0 219 STATE WASTE CODE 220
UNITS* [X] a. GALLONS [] b. CUBIC FEET [] c. POUNDS [] d. TONS [] e. 221 DAYS ON SITE 365 222
STORAGE CONTAINER [X] a. ABOVEGROUND TANK [] b. UNDERGROUND TANK [] c. TANK INSIDE BUILDING [] d. STEEL DRUM
[] e. PLASTIC/NONMETALLIC DRUM [] f. CAN [] g. CARBOY [] h. SILO
[] i. FIBER DRUM [] j. BAG [] k. BOX [] l. CYLINDER
[] m. GLASS BOTTLE [] n. PLASTIC BOTTLE [] o. TOTE BIN [] p. TANK WAGON [] q. RAIL CAR [] r. OTHER:
STORAGE PRESSURE [X] a. AMBIENT [] b. ABOVE AMBIENT [] c. BELOW AMBIENT 224
STORAGE TEMPERATURE [X] a. AMBIENT [] b. ABOVE AMBIENT [] c. BELOW AMBIENT [] d. CRYOGENIC 225

Table with 4 columns: %WT, COMPOSITION (LIST ALL COMPONENTS, HAZARDOUS FIRST), EHS, CAS #. Rows 1-5.

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets

NOTES (Trade names/synonyms or other information relevant to the substances listed)
If EPCRA, Owner/Operator please sign here 246

Date: August 25, 2003



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HAZARDOUS MATERIALS INVENTORY FORM - Chemical Description
One page per item. Indicate if material OR waste (Do not combine materials and wastes on one form)
[X] MATERIAL
[] WASTE

MAKE COPIES OF THIS FORM AS NEEDED.
ATTACH A MATERIAL SAFETY DATA SHEET (MSDS) IF THE MATERIAL IS NOT LISTED IN APPENDIX I OF THIS GUIDE.

I. FACILITY INFORMATION

ESTABLISHMENT # [redacted] (This number is on your CUPA permit.)
ITEM NUMBER
FACILITY ID # 3 6 0 0 1
FACILITY MAP # 203
GRID COORDINATE(s)
BUSINESS NAME
California Cascade Fontana, Inc.
BUSINESS SITE ADDRESS
8395 Sultana Avenue, Fontana, CA 92335

II. CHEMICAL INFORMATION

CHEMICAL NAME 205 Didecyl dimethyl ammonium carbonate
TRADE SECRET? [X] NO 206
Do not disclose trade secrets here. Contact this Dept. for trade secret filing instructions. If EPCRA, follow EPA procedures.
COMMON NAME 207 Carbo NT
EHS* [] YES [X] NO 208
CAS# 209 68391-01-05
EHS = Extremely Hazardous Substance (Appendix B)
* If AN EHS, all weight measurements MUST be in pounds
HAZARDOUS MATERIAL TYPE (Check one item only) [] a. PURE [X] b. MIXTURE [] c. WASTE 211
RADIOACTIVE? Yes [X] No [] CURIES 213
PHYSICAL STATE (Check one item only) [] a. SOLID [X] b. LIQUID [] c. GAS [] d. DUST
LARGEST CONTAINER SIZE: 250 Gallon 215
FEDERAL HAZARD CATEGORIES [X] a. FIRE [] b. REACTIVE [] c. PRESSURE RELEASE [X] d. ACUTE HEALTH [] e. CHRONIC HEALTH 216
AVERAGE AMOUNT 217 6,000 Gallon
MAXIMUM AMOUNT 218 6,000 Gallon
ANNUAL WASTE AMOUNT 219 0
STATE WASTE CODE 220
UNITS* (Check one item only) [X] a. GALLONS [] b. CUBIC FEET [] c. POUNDS [] d. TONS [] e. 221
DAYS ON SITE 222 365
STORAGE CONTAINER (Check all that apply) [X] a. ABOVEGROUND TANK [] e. PLASTIC/NONMETALLIC DRUM [] i. FIBER DRUM [] m. GLASS BOTTLE [] q. RAIL CAR 223
[] b. UNDERGROUND TANK [] f. CAN [] j. BAG [] n. PLASTIC BOTTLE [] r. OTHER:
[] c. TANK INSIDE BUILDING [] g. CARBOY [] k. BOX [] o. TOTE BIN
[] d. STEEL DRUM [] h. SILO [] l. CYLINDER [] p. TANK WAGON
STORAGE PRESSURE [X] a. AMBIENT [] b. ABOVE AMBIENT [] c. BELOW AMBIENT 224
STORAGE TEMPERATURE [X] a. AMBIENT [] b. ABOVE AMBIENT [] c. BELOW AMBIENT [] d. CRYOGENIC 225

Table with 4 columns: %WT, COMPOSITION (LIST ALL COMPONENTS, HAZARDOUS FIRST), EHS, CAS #. Contains 5 rows of chemical components including Didecyl dimethyl ammonium carbonate, N-Dialkylan, n-dimethylamine, Methanol, Propylene Glycol, and Water.

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets

NOTES (Trade names/synonyms or other information relevant to the substances listed)
If EPCRA, Owner/Operator please sign here 246

Date: August 25, 2003



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HAZARDOUS MATERIALS INVENTORY FORM - Chemical Description
One page per item. Indicate if material OR waste (Do not combine materials and wastes on one form)
MATERIAL
WASTE

MAKE COPIES OF THIS FORM AS NEEDED.
ATTACH A MATERIAL SAFETY DATA SHEET (MSDS) IF THE MATERIAL IS NOT LISTED IN APPENDIX I OF THIS GUIDE.

I. FACILITY INFORMATION

ESTABLISHMENT #
FACILITY ID # 3 6 0 0 1
BUSINESS NAME: California Cascade Fontana, Inc.
BUSINESS SITE ADDRESS: 8395 Sultana Avenue, Fontana, CA 92335

II. CHEMICAL INFORMATION

CHEMICAL NAME: NW200 Copper aqueous ammonia solution
COMMON NAME: NW200 C
CAS#: None
HAZARDOUS MATERIAL TYPE: b. MIXTURE
PHYSICAL STATE: b. LIQUID
FEDERAL HAZARD CATEGORIES: a. FIRE
AVERAGE AMOUNT: 10,000 gal.
MAXIMUM AMOUNT: 10,000 gal.
ANNUAL WASTE AMOUNT: 0
STATE WASTE CODE:
UNITS*: a. GALLONS
STORAGE CONTAINER: a. ABOVEGROUND TANK
STORAGE PRESSURE: a. AMBIENT
STORAGE TEMPERATURE: a. AMBIENT

Table with 4 columns: %WT, COMPOSITION (LIST ALL COMPONENTS, HAZARDOUS FIRST), EHS, CAS #. Rows include Copper ammonium carbonate complex, Ammonium Hydroxide, and Water and other components <1% concentration.

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets
NOTES (Trade names/synonyms or other information relevant to the substances listed)
If EPCRA, Owner/Operator please sign here

Date: August 25, 2003



CUPA

San Bernardino County Fire Department • Hazardous Materials Division
620 South "E" Street, San Bernardino, CA 92415-0153 • (909) 386-8401 FAX (909) 386-8460

HAZARDOUS MATERIALS INVENTORY FORM - Chemical Description

One page per item. Indicate if material OR waste (Do not combine materials and wastes on one form)

MATERIAL [X]
WASTE []

MAKE COPIES OF THIS FORM AS NEEDED.
ATTACH A MATERIAL SAFETY DATA SHEET (MSDS) IF THE MATERIAL IS NOT LISTED IN APPENDIX I OF THIS GUIDE.

I. FACILITY INFORMATION

ESTABLISHMENT # [redacted] ITEM NUMBER [redacted]
FACILITY ID # 3 6 0 0 1 FACILITY MAP # 203 GRID COORDINATE(s) [redacted]
BUSINESS NAME California Cascade Fontana, Inc.
BUSINESS SITE ADDRESS 8395 Sultana Avenue, Fontana, CA 92335

II. CHEMICAL INFORMATION

CHEMICAL NAME 205 NW100 Copper ethanolamine solution TRADE SECRET? [X] NO 206
COMMON NAME 207 NW100 C EHS* [] YES [X] NO 208
CAS# 209 None EHS = Extremely Hazardous Substance (Appendix B)
HAZARDOUS MATERIAL TYPE 211 [] a. PURE [X] b. MIXTURE [] c. WASTE RADIOACTIVE? Yes [] No [X] CURIES 213
PHYSICAL STATE 215 [] a. SOLID [X] b. LIQUID [] c. GAS [] d. DUST LARGEST CONTAINER SIZE: 20,000 gallon
FEDERAL HAZARD CATEGORIES 216 [] a. FIRE [] b. REACTIVE [] c. PRESSURE RELEASE [X] d. ACUTE HEALTH [] e. CHRONIC HEALTH
AVERAGE AMOUNT 217 20,000 Gallons MAXIMUM AMOUNT 218 20,000 Gallons ANNUAL WASTE AMOUNT 219 0 STATE WASTE CODE 220
UNITS* 221 [] a. GALLONS [] b. CUBIC FEET [] c. POUNDS [] d. TONS [] e. DAYS ON SITE 222 365
STORAGE CONTAINER 223 [X] a. ABOVEGROUND TANK [] e. PLASTIC/NONMETALLIC DRUM [] i. FIBER DRUM [] m. GLASS BOTTLE [] q. RAIL CAR
[] b. UNDERGROUND TANK [] f. CAN [] j. BAG [] n. PLASTIC BOTTLE [] r. OTHER:
[] c. TANK INSIDE BUILDING [] g. CARBOY [] k. BOX [] o. TOTE BIN
[] d. STEEL DRUM [] h. SILO [] l. CYLINDER [] p. TANK WAGON
STORAGE PRESSURE 224 [X] a. AMBIENT [] b. ABOVE AMBIENT [] c. BELOW AMBIENT
STORAGE TEMPERATURE 225 [X] a. AMBIENT [] b. ABOVE AMBIENT [] c. BELOW AMBIENT [] d. CRYOGENIC

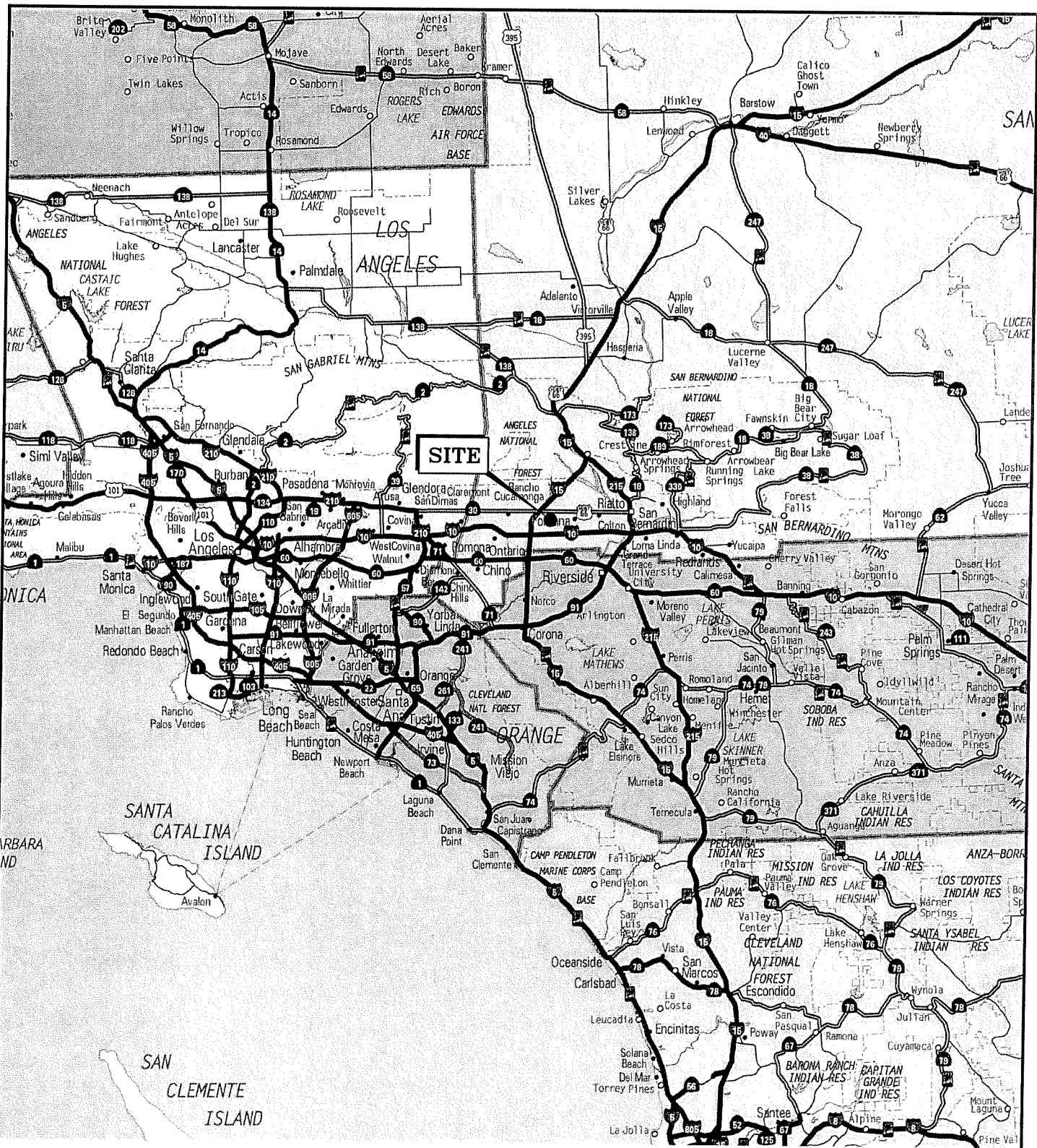
Table with 4 columns: %WT, COMPOSITION (LIST ALL COMPONENTS, HAZARDOUS FIRST), EHS, CAS #. Contains 5 rows of chemical components.

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets

NOTES (Trade names/synonyms or other information relevant to the substances listed) If EPCRA, Owner/Operator please sign here 246

Date: August 25, 2003

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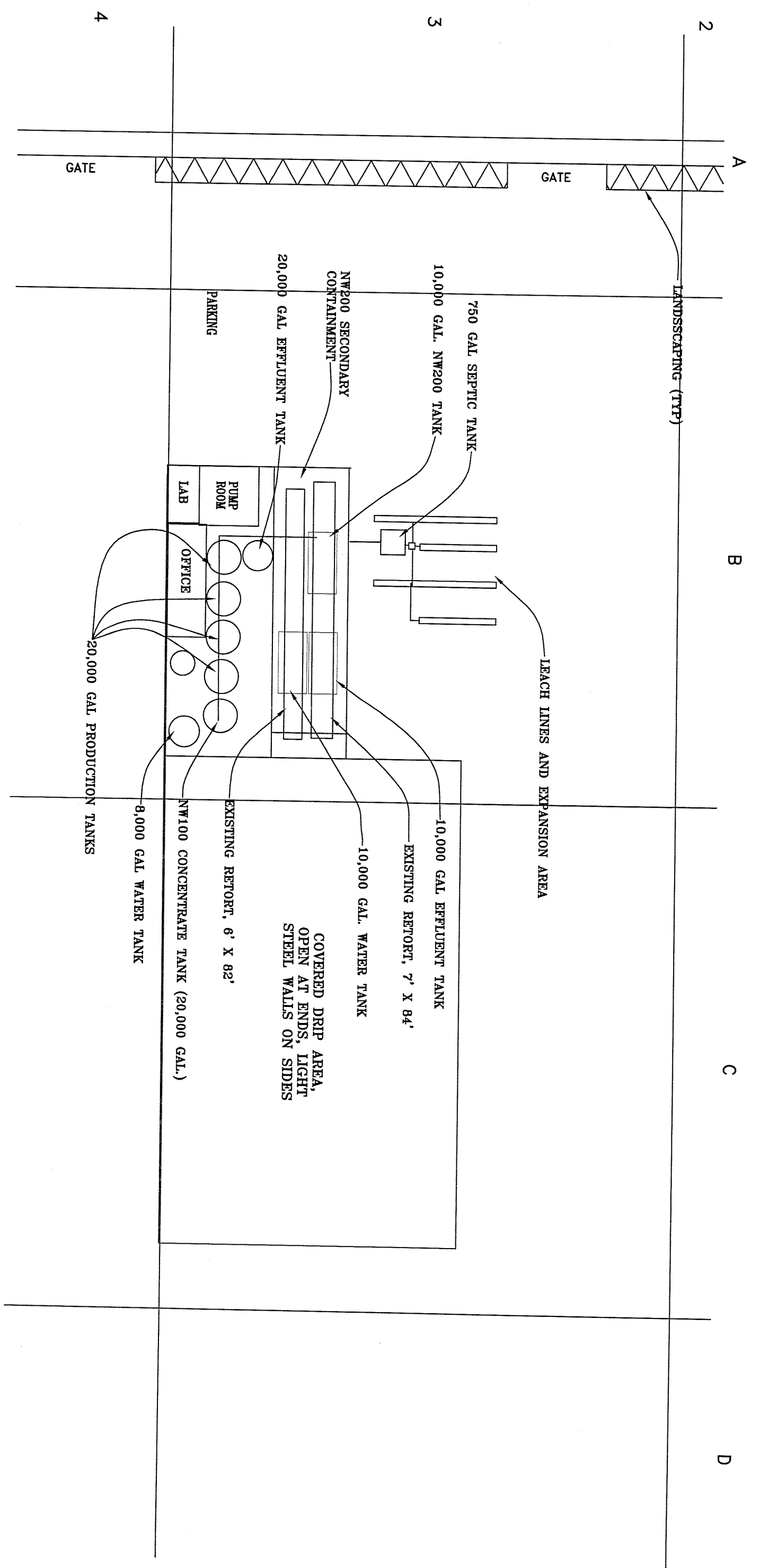


BASE MAP SOURCE: THOMAS BROTHERS

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EXCELLENT SERVICE SINCE 1971

SITE VICINITY MAP
CALIFORNIA CASCADE PONTANA
FONTANA, CALIFORNIA

PROJECT NO.: 5827.5.001.01	FIGURE NO.
DATE: JULY 2003	1
DRAWN BY: DLB	



ENGEO
INCORPORATED
EXCELLENT SERVICE SINCE 1971

FACILITY MAP
CALIFORNIA CASCADE PONTANA
PONTANA, CALIFORNIA

PROJECT NO.: 5827.5.001.01
DATE: JULY 2003
DRAWN BY: DLB
CHECKED BY:

FIGURE NO.
3

G:\Working\DRX\IN2\Job\5827\001\5827500101-3f cad.dwg 8-25-03 03:28:25 PM

APPENDIX E

**COMMENTS AND RESPONSES TO COMMENTS ON DRAFT NEGATIVE
DECLARATION**

APPENDIX E

FINAL NEGATIVE DECLARATION

CALIFORNIA CASCADE FONTANA

WOOD TREATING PROCESS MODIFICATION PROJECT

RESPONSE TO COMMENTS

INTRODUCTION

This Appendix, together with the Draft Negative Declaration constitutes the Final Negative Declaration for the California Cascade Fontana Wood Treating Process Modification Project.

The Negative Declaration was circulated for a 30-day public review and comment period from April 26, 2005 through May 25, 2005. The Negative Declaration is also available at the South Coast Air Quality Management District (SCAQMD), 21865 Copley Drive, Diamond Bar, California 91765-4182 or by phone at (909) 396-2039. The Negative Declaration can also be downloaded by accessing the SCAQMD's CEQA web pages at <http://www.aqmd.gov/ceqa/nonaqmd.html>.

The Draft Negative Declaration included a detailed project description, the environmental setting for each environmental resource, and an analysis of the each environmental resource on the California Environmental Quality Act (CEQA) checklist including all potentially significant environmental impacts. Based on the Draft Negative Declaration, no significant adverse environmental impacts were identified associated with the proposed project.

The SCAQMD received one comment letter on the Draft Negative Declaration during the public comment period. Response to the comment letter is presented in this Appendix. The comments are bracketed and numbered. The related responses are identified with the corresponding number and are included in the following pages.

In order to adequately address the comments raised in the comment letters, new information is provided to merely clarify, amplify or make insignificant modifications to the Negative Declaration. Pursuant to CEQA Guidelines §15073.5(c)(2), recirculation is not necessary since the information is provided in response to written comments on the project's effects and does not result in new avoidable significant effects.

COMMENT LETTER NO. 1
State of California, Environmental Protection Agency
Department of Toxics Substances Control

Greg Holmes
May 25, 2005

Response 1-1

There is no documentation or evidence of historic hazardous substance or hazardous wastes at California Cascade Fontana (CCF) in conjunction with current or historic activities. An analysis of the increased quantities of hazardous materials to be used at CCF was completed and found that there is not a significant increase in probability of a release. No demolition or new physical construction is required to implement the proposed project at the existing site. Contaminated sludge from the wood treatment process that meets the definition of "*hazardous waste*," will be placed in covered 55-gallon drums, stored on-site for no more than 90 days, and handled per the requirements of Title 22 California Code of Regulations Chapter 12. Since these drums are kept on site for no more than 90 days, only a temporary EPA ID number is required. This number changes for each occurrence. Approximately ten 55-gallon drums of hazardous materials are currently generated as part of the existing wood treatment process at CCF and historically removed from the site under a Uniform Hazardous Waste Manifest to a facility such as Kettleman Hills in central California. These drums contain sludge and wood debris with elevated levels of copper. The contents of the drums are not expected to change or become more hazardous. As mentioned in the Hazards Section of the Negative Declaration (ND), no increases in hazardous waste are expected as a result of the proposed project. In addition, there have been no reported incidents of spills or accidental releases of hazardous materials at CCF.

Response 1-2

As indicated in Response 1-1, there have been no reported incidences or spills of hazardous materials or hazardous wastes from CCF. Therefore, a Phase One Environmental Site Assessment including a review of the databases listed is not warranted at this time. Conditions at the site as a result of the proposed project were evaluated in the Environmental Checklist of the Draft ND to determine if a threat to human health or the environment is generated. Since this proposed project is limited to altering the types of and quantities of chemicals to be used at CCF, and there is no proposed demolition or new physical construction activities required to implement the proposed project, and the environmental impacts from the proposed project are less than significant, a Phase One Environmental Site Assessment is not necessary and, thus, was not conducted. This proposed project will use existing tanks, pumps, and other hardware.

Response 1-3

As indicated in Response 1-1, there have been no reported incidents of spills or accidental releases of hazardous wastes/substances at CCF. In the event of an accidental release, the Hazardous Materials Division of the San Bernardino County Fire Department is designated by the State Secretary for Environmental Protection as the Certified Unified Program Agency or "CUPA" for the County of San Bernardino in order to focus the management of specific environmental programs at the local government level. The CUPA is charged with the responsibility of conducting compliance inspections for CCF and over 7000 regulated facilities in San Bernardino County. The CUPA provides a comprehensive environmental management approach to resolve environmental issues. In the event of a spill or release that warrants the involvement of the San Bernardino Fire Department, the Business Emergency Response Plan for CCF is on file with the Fire Department, which will assist in producing an appropriate response. During this response, if additional resources are warranted such as resources provided by the Santa Ana Regional Water Quality Control Board, the South Coast Air Quality Management District, or the Department of Toxic Substances Control, the Fire Department is expected to coordinate the addition of the appropriate regulatory agencies.

Response 1-4

There is no evidence that an environmental investigation of the CCF site is warranted at this time, so there is no existing workplan, environmental investigation, sampling or remediation underway with regulatory oversight at CCF. If a hazardous material/waste investigation or cleanup is required in the future, appropriately licensed professionals will be retained to complete the work under oversight of the appropriate regulatory agency. Depending on the hazardous material/waste being investigated, the licensed professional and CCF will request appropriate regulatory oversight which may include one of or a combination of the following regulatory agencies: Department of Toxic Substances Control, Santa Ana Regional Water Quality Control Board, and the San Bernardino County Fire Department. The facility currently complies with applicable rules regarding handling and disposing of hazardous waste.

Response 1-5

There is no evidence that an environmental investigation of the CCF site is warranted at this time. No environmental investigation, sampling or remediation is underway prior to new development or construction at CCF because no demolition or new physical construction activities are required to implement the proposed project at the existing site.

Response 1-6

CCF is an existing wood treating facility in operation. Additionally, no demolition or new physical construction activities are required to implement the proposed project at the existing site. CCF is not within the Border Zone of any listed contaminated sites. The current properties within 2000 feet of CCF include the following companies or uses:

Ferrel Natural Gas, Universal Forest Truss Manufacturing, steel fabrication/manufacturing facilities, automobile salvage yards, pipe distribution companies, fire protection manufacturing, spa manufacturing, pressure treated lumber company, trailer manufacturer, construction companies, pallet yards, and residences. There is no known hazardous material contamination from these surrounding facilities which would require a Border Zone of Contaminated Property. The closest residential structure is just beyond the 2000 foot radius from the proposed project.

Response 1-7

Because no demolition or new physical construction activities are required to implement the proposed project, an investigation into lead-based paints, asbestos containing materials, biohazards or other waste water chemicals typically exposed during the demolishing of property is not necessary or required. Further, soil remediation will also not be warranted if ground surface is not expected to be excavated or graded.

Response 1-8

As mentioned in Responses 1-5 and 1-7, no demolition or new physical construction activities are required to implement the proposed project at the existing site. Thus, soil excavation and soil filling will not result from the proposed project and, therefore, the proposed project will not be subject to land disposal and soil remediation requirements.

Response 1-9

No significant adverse impacts to human health and the environment of sensitive receptors will occur during either the construction or operational phase of the proposed project. As noted in Response 1-1, there have been no reported incidents of spills or accidental releases of hazardous wastes or substances. Further, no demolition or new physical construction activities are required to implement the proposed project, so a study of the releases of hazardous materials during construction is not warranted. The releases of hazardous materials during the operational phase of the CCF project were evaluated in the Hazards section of the ND. The analysis concluded that the worst case scenario outcome from an NW-200 AST overfilling event, the NW-200 storage and handling process is eligible for a RMP Program Level 1 classification. In the event of a “worst-case” release, concentrations at the fence line would not be high enough to reach levels that would cause serious health effects. In addition, the potential impacts due to accidental release of ammonia during transportation are less than significant, as indicated in the Draft ND.

Response 1-10

Approximately ten 55-gallon drums of hazardous materials are currently generated annually by the wood treatment process at CCF. As stated in Response 1-1, these drums are covered and stored on-site for no longer than 90 days prior to being removed from the

site under a Uniform Hazardous Waste Manifest for appropriate disposal at a facility such as Kettleman Hills in Central California. Since this facility is a Conditionally Exempt Small Quantity Generator, a temporary California EPA ID number has been requested for the Uniform Hazardous Waste Manifest at each occurrence of pick up and disposal. There is no approval process for the temporary EPA ID numbers. To obtain a number, CCF would only need to call the Department of Toxic Substances Control. CCF currently complies with the State of California hazardous material/waste handling and disposal regulations.

Response 1-11

Approximately ten 55-gallon drums of hazardous materials are currently generated by the wood treatment process at CCF annually and removed from the site under a Uniform Hazardous Waste Manifest for appropriate disposal. The hazardous wastes generated by CCF are placed into covered 55-gallon drums, stored on-site for no longer than 90 days and handled per the requirements of Title 22 California Code of Regulations, Chapter 12. Since this facility is a Conditionally Exempt Small Quantity Generator, a permanent EPA ID number is not required. However, a temporary California EPA ID number has been requested from the DTSC for the Uniform Hazardous Waste Manifest at each occurrence of pick up and disposal. No treatment or disposal of hazardous wastes has historically taken place within CCF nor is it planned. If hazardous waste management and disposal regulation should change to require a more frequent pick up and disposal of CCF generated hazardous waste, CCF will comply with all applicable rules.

Response 1-12

Approximately ten 55-gallon drums of hazardous materials are currently generated by the wood treatment process at CCF and removed from the site under a Uniform Hazardous Waste Manifest for appropriate disposal as described in Response 1-1. This hazardous waste includes sludge from the wood treatment system and wood scrap from the wood treatment system. On average CCF collects less than 220 pounds of hazardous materials per month, the Conditionally Exempt Small Quantity Generator threshold identified by San Bernardino County. Being a CESQG, only a temporary California EPA ID number is required to disposed of hazardous wastes stored on-site no more than 90 days. This waste is manifested under the Uniform Hazardous Waste Manifest using a new EPA ID number for each occurrence of pick up and disposal. The temporary EPA ID number is specifically used for a single use event such as would occur at CCF. Since the State of California's Department of Toxic Substances Control is the State's designated agency responsible with Resource Conservation Recovery Act (RCRA) enforcement, a USEPA ID Number is not required for CCF. CCF acquires a temporary California EPA ID number from the DTSC each time hazardous materials are prepared for pick up from CCF. No increase in the quantity of hazardous waste generated is anticipated as part of this proposed project. However, if the quantity of hazardous waste generated does increase at CCF in the future, the necessary permitting and inspection activities that may accompany such increases will be completed.

Response 1-13

As described in Response 1-3, the CCF is subject to the San Bernardino County Fire Department CUPA. Further, no hazardous waste treatment processes occur at the CCF facility. As noted in Response 1-1, hazardous wastes are picked up and transported to an appropriate disposal treatment facility.

Response 1-14

Surface storm water runoff currently exits CCF at the southwest corner. CCF has a storm water pollution prevention plan which includes sampling and analysis requirements for all industrial activities taking place at CCF. CCF currently has an approved Waste Discharge Requirement (WDR) permit issued by the Santa Ana Regional Water Quality Control Board and is compliant with the existing order. As part of the proposed project, no new requirements are planned for the WDR. However, the WDR renewal along with a new Industrial Storm Water Pollution Prevention Plan/Sampling and Analysis Plan have been prepared and reviewed by the Santa Ana Regional Water Quality Control Board. No timeframe for the issuance of the new WDR has been communicated by the Regional Board. The issuance of the new permit will be done once the State Water Resources Control Board has finalized the new state-wide industrial general permit. The Regional Board has notified CCF that they appear to be in compliance with their WDR and that until the State Board issues the new state-wide permit, the existing WDR will remain in place.

Response 1-15

Regarding potential demolition and construction, please refer to Response 1-8.

Response 1-16

The CCF site has not historically known to have been used for agriculture production with the potential for weed abatement uses. Thus, soil/groundwater contamination resulting from pesticide and agricultural chemical residue used in weed abatement is not expected at the site. Further, no demolition or new physical construction activities are required to implement the proposed project at the existing site, so soil investigation and remedial actions are not necessary.



Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

5796 Corporate Avenue
Cypress, California 90630



Arnold Schwarzenegger
Governor

May 25, 2005

Mr. Michael A. Krause
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

NEGATIVE DECLARATION FOR CALIFORNIA CASCADE FONTANA, INC. WOOD TREATING PROCESS MODIFICATION PROJECT (SCH#2005041145)

Dear Mr. Krause:

The Department of Toxic Substances Control (DTSC) has received your submitted Negative Declaration (ND) for the above-mentioned project. As stated in your document: "California Cascade Fontana is proposing to increase the quantity of shipment of NW-200 from 550 gallons to 6,000 gallons per shipment, and increase the average amount of NW-200 aboveground storage tank monthly throughput from 700 gallons to 10,000 gallons. Additionally, California Cascade Fontana is proposing to obtain shipment and storage review and approval for a new product with a market trade name of Carbo-NT."

Based on the review of the submitted document DTSC has comments as follows:

- 1-1 1) The ND should identify and determine whether current or historic uses at the project site may have resulted in any release of hazardous wastes/substances.
- 1-2 2) For all identified sites, the ND should evaluate whether conditions at the site may pose a threat to human health or the environment. A Phase I Assessment may be sufficient to identify these sites. Following are the databases of some of the regulatory agencies:
- National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).
 - Site Mitigation Program Property Database (formerly CalSites): A Database primarily used by the California Department of Toxic Substances Control.

1-2
cont.

- Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.
- Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
- Leaking Underground Storage Tanks (LUST) / Spills, Leaks, Investigations and Cleanups (SLIC): A list that is maintained by Regional Water Quality Control Boards.
- Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
- The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).

1-3

- 3) The ND should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If hazardous materials or wastes were stored at the site, an environmental assessment should be conducted to determine if a release has occurred. If so, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. It may be necessary to determine if an expedited response action is required to reduce existing or potential threats to public health or the environment. If no immediate threat exists, the final remedy should be implemented in compliance with state regulations, policies, and laws.

The ND states that "the onsite storage of the increase quantity of NW-200 does not increase the potential of an accidental onsite spill and release, as compared to the current quantities of NW-200 stored onsite. The greatest potential for an onsite spill and release event has been previously identified to be associated with the filling operation for the NW-200 AST. Relative to the hazards associated with

1-3
cont.

a potential onsite spill and release event for NW-200, a report was previously prepared by PARSONS ("Air Dispersion Modeling Study, Worst-Case Release Scenario for Storage of Ammoniacal (NW-200) Cooper Solution, September 2003) to evaluate the risks of an NW-200 spill and release event associated with the existing 9,400 gallon NW-200 AST."

1-4

4) All environmental investigations, sampling and/or remediation should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous waste cleanup. The findings and sampling lab results from the subsequent report should be clearly summarized in a table in the ND.

1-5

5) Proper investigation, sampling and remedial actions overseen by a regulatory agency, if necessary, should be conducted at the site prior to the new development or any construction.

1-6

6) If any property adjacent to the project site is contaminated with hazardous chemicals, and if the proposed project is within 2,000 feet from a contaminated site, except for a gas station, then the proposed development may fall within the "Border Zone of a Contaminated Property." Appropriate precautions should be taken prior to construction if the proposed project is within a "Border Zone Property."

1-7

7) If building structures, asphalt or concrete-paved surface areas or transportation structures are planned to be demolished, an investigation should be conducted for the presence of lead-based paints or products, asbestos containing materials (ACMs), biohazards and other waste water chemicals of concern. If lead-based paints or products or ACMs, or other chemicals of concern are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations, policies, and laws.

1-8

8) The project construction may require soil excavation and soil filling in certain areas. Appropriate sampling is required prior to disposal of the excavated soil. If the soil is contaminated, properly dispose of it rather than placing it in another location. Land Disposal Restrictions (LDRs) may be applicable to these soils. Also, if the project proposes to import soil to backfill the areas excavated, proper sampling should be conducted to make sure that the imported soil is free of contamination.

- 1-9 9) Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. A study of the site overseen by the appropriate government agency might have to be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.
- 1-10 10) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5).
- 1-11 11) If it is determined that hazardous wastes are or will be generated and the wastes are (a) stored in tanks or containers for more than ninety days, (b) treated onsite, or (c) disposed of onsite, then a permit from DTSC may be required. If so, the facility should contact DTSC at (818) 551-2171 to initiate pre application discussions and determine the permitting process applicable to the facility.
- 1-12 12) If it is determined that hazardous wastes will be generated, the facility should obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942.
- 1-13 13) Certain hazardous waste treatment processes may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.
- 1-14 14) If the project plans include discharging wastewater to storm drain, you may be required to obtain a wastewater discharge permit from the overseeing Regional Water Quality Control Board.
- 1-15 15) If during construction/demolition of the project, soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exist, the ND should identify how any required investigation and/or remediation will be conducted, and the appropriate government agency to provide regulatory oversight.
- 1-16 16) If the project area was used for agriculture or if weed abatement was done onsite, soils may contain pesticide and agricultural chemical residue. If so, activities at the site may have contributed to soil and groundwater contamination.

Mr. Michael A. Krause
May 25, 2005
Page 5

1-16
cont.

Proper investigation and remedial actions, if necessary, should be conducted at the site prior to construction of the project.

DTSC provides guidance for cleanup oversight through the Voluntary Cleanup Program (VCP). For additional information on the VCP, please visit DTSC's web site at www.dtsc.ca.gov.

If you have any questions regarding this letter, please contact Mr. Joseph Cully, Project Manager, at (714) 484-5473 or email at jcully@dtsc.ca.gov.

Sincerely,



Greg Holmes
Unit Chief
Southern California Cleanup Operations Branch - Cypress Office

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

Mr. Guenther W. Moskat, Chief
Planning and Environmental Analysis Section
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

CEQA #1133