PROJECT REPORT

TO: PLANNING COMMISSION **AGENDA DATE** July 23, 2025

FROM: PLANNING AND DEVELOPMENT SERVICES **AGENDA TIME** 9:00 AM/No. 5.

RASIRC Imperial Facility

PROJECT TYPE: Conditional Use Permit #24-0024 SUPERVISOR DIST: #5

LOCATION: 3555 Old Highway 111, Imperial, CA 92251 APN: 040-250-024-000

PARCEL SIZE: +/-9.59 Acres

GENERAL PLAN (existing) Mesquite Lake Specific Plan GENERAL PLAN (proposed) N/A

ZONE (existing ML-I-2-RE ZONE (proposed) N/A

GENERAL PLAN FINDINGS ☒ CONSISTENT ☐ INCONSISTENT ☐ MAY BE/FINDINGS

PLANNING COMMISSION DECISION: HEARING DATE: 07/23/2025

☐ APRROVED ☐ DENIED ☐ OTHER

PLANNING DIRECTORS DECISION: HEARING DATE: _____

☐ APPROVED ☐ DENIED ☐ OTHER

ENVIROMENTAL EVALUATION COMMITTEE DECISION: HEARING DATE: 04/24/2025

INITIAL STUDY: #24-0034

☐ NEGATIVE DECLARATION ☐ MITIGATED NEG. DECLARATION ☐ EIR

DEPARTMENTAL REPORTS / APPROVALS:

PUBLIC WORKS	☒ NONE	☐ ATTACHED
AG	☐ NONE	☒ ATTACHED
APCD	☐ NONE	☒ ATTACHED
E.H.S.	☒ NONE	☐ ATTACHED
FIRE / OES	☒ NONE	☐ ATTACHED
SHERIFF	☒ NONE	☐ ATTACHED
OTHER	CDFW, CalTrans, DTSC	

REQUESTED ACTION:

STAFF RECOMMENDS THAT THE PLANNING COMMISSION HOLD A PUBLIC HEARING, HEAR ALL THE PROPONENTS AND OPPONENTS OF THE PROPOSED PROJECT, AND THEN TAKE THE FOLLOWING ACTIONS:

1. **ADOPT THE MITIGATED NEGATIVE DECLARATION BY FINDING THAT THE PROPOSED PROJECT WOULD NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT; AND**

2. **APPROVE THE ATTACHED RESOLUTION AND SUPPORTING FINDINGS, FOR CONDITIONAL USE PERMIT (CUP) #24-0024 SUBJECT TO ALL THE CONDITIONS AND AUTHORIZE THE PLANNING & DEVELOPMENT SERVICES DIRECTOR TO SIGN THE CONDITIONAL USE PERMIT UPON RECEIPT FROM THE PERMITTEE.**

STAFF REPORT
Planning Commission
July 23, 2025

Project Name: RASIRC Imperial Facility
Conditional Use Permit #24-0024

Applicant/Owner: RASIRC, Inc.
7815 Silverton Ave
San Diego, CA 92126

Project Location:

The project site is located at 3555 Old Highway 111, Imperial, CA 92251. The project parcel is identified as 040-250-024-000 and is legally described as Parcel 4 of Parcel Map 802 of TR 58 14-14 9.59 AC.

Project Summary:

The applicant submitted a Conditional Use Permit application (CUP #24-0024) for a Hydrazine (N2H4 Dinitrogen Tetrahydride) processing facility, with Initial Study #24-0034. The proposed building will be a total of 7,000 square feet. This building will be a warehouse facility with an office, parking, and site improvements. The building will have driveway access from Old Highway 111. This project will be located on property identified under Assessor's Parcel Number (APN) 040-250-024-000, within the Mesquite Lake Specific Plan area.

The proposed Hydrazine processing facility will be built, ensuring safe handling, efficient production, and compliance with industry standards. The facility will include storage metal containers with appropriate cabinets and containers for raw chemical materials and waste, detached from the main building and constructed to store chemicals safely. The hydra-storage is required near the building because there is going to be a double wall pipe (to prevent leaks) connected from the storage to the building to route the hydrazine for processing. The office portion of the building is located on the east side, near the parking lot. A total of 4 to 12 employees will be working in the warehouse/office, with daily operating hours estimated to be from 7:00 am to 5:00 pm approximately.

This site will provide 15 automobile parking stalls as required by the County of Imperial zoning ordinance. A box delivery truck (UPS truck) will have access to the unloading area for shipping and receiving, approximately 5 to 10 times a month.

Employees' responsibilities will cover production management, process control, facilities and safety management based on requirements set forth by OSHA, GHS, Fire Code and any other applicable standards. Extensive, periodic safety training is required and

conducted annually and upon initial employment. All employees are required to participate in all safety-related training and full adherence to established procedures. The facility will be a secure, closed environment with an access-controlled building (badging) inside a fenced environment (gated entry).

The facilities operations consist of receiving low grade Hydrazine chemical shipped under United Nations (UN) 2029 that typically has contaminates and moisture levels in the 0.01% range of the total composition. This hydrazine is then purified and dried so that the moisture levels are less than 0.0000001% of the total composition. This level of purity is necessary for many of the stringent requirements in semiconductor manufacturing.

The applied process for the purification of Hydrazine consists of passing Hydrazine through moisture absorbing inert media until high purity levels are obtained. Once the purity is established, the "dry" Hydrazine gets transferred into small vessels filled with an inert dried solvent material which are then packaged and shipped using standard IATA and DOT dangerous goods shipping practices. The purified hydrazine is trademarked as Brute ® Hydrazine. Hazardous waste will be collected and properly disposed of by a licensed third-party company.

Land Use Analysis:

The proposed project is located within the Mesquite Lake Specific Plan per the General Plan and zoned "ML-I-2-RE" (Mesquite Lake Medium Industrial with Renewable Energy Overlay) per Imperial County Land Use Ordinance (Title 9) and the Mesquite Lake Specific Plan. The project is consistent with the General Plan as "Minimum Impact Heavy Manufacturing" is an allowed use with an approved Conditional Use Permit per Mesquite Lake Specific Plan, Chapter III, Section A "Land Use Plan".

Surrounding Land Uses, Zoning and General Plan Designations:

DIRECTION	CURRENT LAND USE	ZONING	GENERAL PLAN
Project Site	Vacant Land	ML-I-2-RE	Mesquite Lake Specific Plan
North	Solar Farm	ML-I-2-RE	Mesquite Lake Specific Plan
South	Power Plant	ML-I-3-RE	Mesquite Lake Specific Plan
East	Vacant Land	ML-I-2-RE	Mesquite Lake Specific Plan
West	Vacant Land	ML-I-3-RE	Mesquite Lake Specific Plan

Environmental Determination:

On April 24, 2025, the Environmental Evaluation Committee (EEC) determined that Conditional Use Permit (CUP) #24-0024 for the construction and operation of a Hydrazine processing facility, could result in a significant effect, mitigation measures are available to reduce these significant effects to insignificant levels, and made the determination for a Mitigated Negative Declaration (MND). The EEC Committee consists of a seven (7) member panel, integrated by the Director of Environmental Health Services, Imperial County Fire Chief, Agricultural Commissioner, Air Pollution Control Officer, Director of the Department of Public Works, Imperial County Sheriff, and the Director of Planning and Development Services.

On April 29, 2025, the Notice of Intent for the Mitigated Negative Declaration was filed with the Imperial County Clerk-Recorder, posted and circulated for a 35-day comment period from April 29, 2025, to June 03, 2025. Comments received were made part of this package.

Staff Recommendation:

It is recommended that you conduct a public hearing and hear all the opponents and proponents of the proposed project. Staff would then recommend that you take the following action:

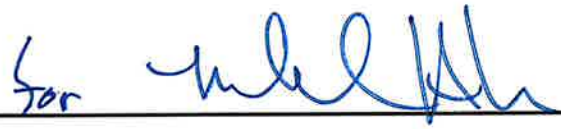
1. Adopt the Mitigated Negative Declaration by finding that the proposed project would not have a significant effect on the environment as recommended at the Environmental Evaluation Committee (EEC) hearing on April 24, 2025; and,

2. Adopt the attached Resolution(s) and supporting finding, approving Conditional Use Permit (CUP) #24-0024 subject to all the conditions, and authorize the Planning & Development Services Director to sign the CUP upon receipt from the applicant.

PREPARED BY: Luis Bejarano, Planner II
Planning & Development Services

REVIEWED BY: Michael Abraham, AICP, Assistant Director
Planning & Development Services

APPROVED BY: Jim Minnick, Director
Planning & Development Services



ATTACHMENTS:
A. Vicinity Map
B. Site Plan
C. CEQA Resolutions
D. Planning Commission Resolutions
E. CUP #24-0024 Conditions of Approval
F. Mitigation Monitoring and Reporting Program
G. EEC Original Package
H. Health Risk Assessment
I. Hazardous Materials and Waste Management Plan
J. Comment Letters

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ATTACHMENT "A" - VICINITY MAP

PROJECT LOCATION MAP

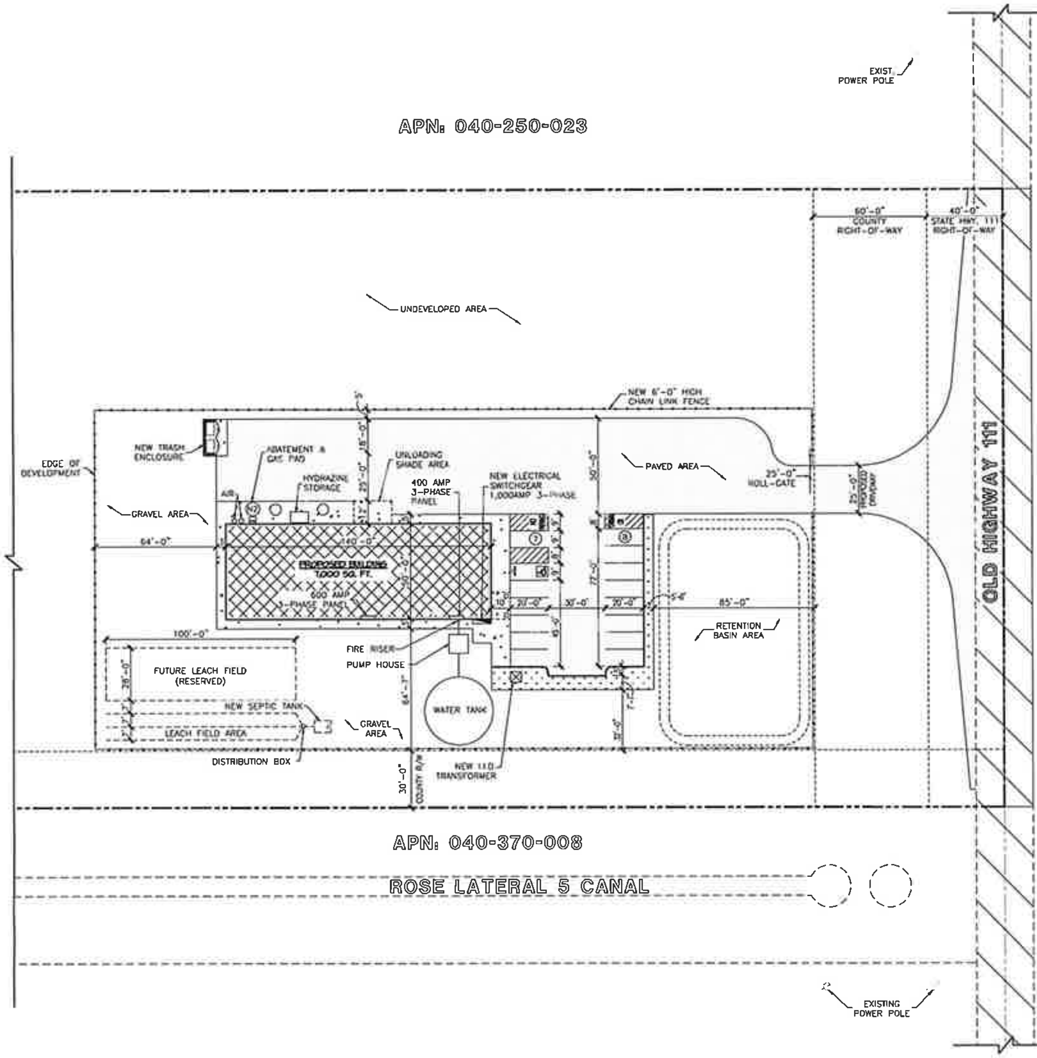
RASIRC IMPERIAL FACILITY
CUP #24-0024 / IS #24-0034
040-250-024-000

Project Location
Centerline
Parcels

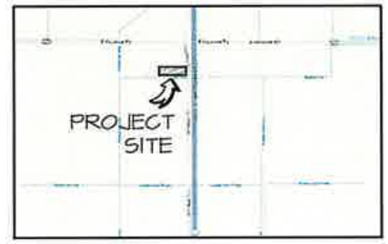
N

ATTACHMENT "B" – SITE PLAN

RASIRC IMPERIAL FACILITY
E. KEYSTONE RD, IMPERIAL, CA. 92251



SITE PLAN
SCALE: 1"=30'-0"



VICINITY MAP
NOT TO SCALE

PROJECT DATA

PROPERTY OWNER:
RASIRC
7815 SILVERTON AVE.
SAN DIEGO, CA 92126

PROPERTY ADDRESS:
E. KEY STONE RD.
IMPERIAL, CA. 92251

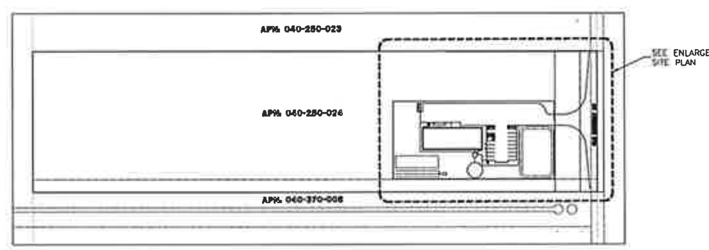
CONTRACTOR/DRAFTER:
DUGGINS CONSTRUCTION, INC.
341 W. CROWN COURT
IMPERIAL, CA. 92251

HATCH LEGEND

- NEW PAVED AREAS
- PROPOSED BUILDING
- NEW CONCRETE AREAS
- NEW LANDSCAPE AREAS
- UNDEVELOPED AREA
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- NEW 6' CHAIN-LINK FENCE

BUILDING DATA

ASSESSOR'S PARCEL No:	040-250-024
LEGAL DESCRIPTION	PAR 4 PM 802 OF TR 58 14-14 9.59 AC
ZONING:	MU-2-RE
SITE AREA	9.59 ACRES (±417,740.00 SQ. FT.)
DEVELOPED AREA:	73,543 SQ. FT.
EXISTING USE:	VACANT
BUILDING USE:	WAREHOUSE/OFFICE
TYPE OF CONSTRUCTION	V-B
PROPOSED BUILDING:	7,000 SQ. FT.
HEIGHT:	18'-0"
STORIES:	SINGLE STORY
PARKING REQUIRED:	15 PARKING STALLS
PARKING PROVIDED:	14 CUSTOMER REGULAR PARKING STALLS 1 ACCESIBLE PARKING STALLS 15 TOTAL PARKING STALLS
LANDSCAPE REQUIRED:	10% OF THE DEVELOPED AREA= 7,354.30 SQ. FT. (INCLUDING 5% OF THE PARKING LOT= 257.94 SQ. FT.) TOTAL LANDSCAPE REQUIRED = 7,354.30 SQ. FT.
LANDSCAPE PROVIDED:	ON SITE = 1,279 SQ. FT. RETENTION BASIN= 7,416 SQ. FT. TOTAL LANDSCAPE PROVIDED= 8,695 SQ. FT.



OVERALL PLAN
N.T.S

PROPERTY BOUNDARY NOTE:
THE PROPERTY OR BOUNDARY LINES SHOWN ON THIS PLAN ARE AN APPROXIMATE AND ASSUMED LOCATION. THIS PLAN SHALL NOT BE USED AS A LEGAL DOCUMENT FOR LOCATING, ESTABLISHING OR DEPICTING PROPERTY LINES. IF PROPERTY LINES NEED TO BE ESTABLISHED OR IDENTIFIED, A REGISTERED LAND SURVEYOR WILL PREPARE THE NECESSARY SURVEY.

DISCLAIMER

DUGGINS CONSTRUCTION
PARTNERS IN DEVELOPMENT
341 WEST CROWN COURT, IMPERIAL, CA 92251
PHONE: 760.355.5600 • FAX: 760.355.8756
LIC. # 290934
www.dugginsconstruction.com

PROJECT:	RASIRC IMPERIAL FACILITY OLD HWY 111, IMPERIAL, CA 92251
SCALE: AS SHOWN	DATE: 04/01/2025
DRAWN BY:	M.G.
SHEET CONTENTS: SITE PLAN	JOB No. 2024-026
DRAWING No.	1 /4

ATTACHMENT "C" – CEQA RESOLUTIONS

RESOLUTION NO. _____ CEQA

A RESOLUTION OF THE PLANNING COMMISSION FOR THE COUNTY OF IMPERIAL, CALIFORNIA, ADOPTING THE "MITIGATED NEGATIVE DECLARATION" (INITIAL STUDY #24-0034) FOR CONDITIONAL USE PERMIT #24-0024 (RASIRC Imperial Facility).

WHEREAS, on April 11, 2025, a Public Notice was mailed to the surrounding property owners advising them of the Environmental Evaluation Committee hearing scheduled for April 24, 2025; and,

WHEREAS, a Mitigated Negative Declaration and CEQA Findings were prepared in accordance with the requirements of the California Environmental Quality Act, State Guidelines, and the County's "Rules and Regulations to Implement CEQA, as Amended"; and,

WHEREAS, on April 24, 2025, the Environmental Evaluation Committee heard the project and recommended the Planning Commission of the County of Imperial to adopt the Mitigated Negative Declaration for Conditional Use Permit #24-0024; and

WHEREAS, the Mitigated Negative Declaration was circulated for 35 days from April 29, 2025, to June 3, 2025; and,

WHEREAS, the Planning Commission of the County of Imperial has been designated with the responsibility of adoptions and certifications; and,

NOW, THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

The Planning Commission has reviewed the attached Mitigated Negative Declaration (MND) prior to approval of Conditional Use Permit #24-0024. The Planning Commission finds and determines that the Mitigated Negative Declaration is adequate and was prepared in accordance with the requirements of the Imperial County General Plan, Land Use Ordinance and the California Environmental Quality Act (CEQA), which analyses environmental effects, based upon the following findings and determinations:

1. That the recital set forth herein are true, correct and valid; and,

2. That the Planning Commission has reviewed the attached Mitigated Negative Declaration (MND) for Conditional Use Permit #24-0024 and considered the information contained in the Mitigated Negative Declaration together with all comments received during the public review period and prior to approving the Conditional Use Permit; and,

3. That the Mitigated Negative Declaration reflects the Planning Commission independent judgment and analysis.

NOW, THEREFORE, the County of Imperial Planning Commission **DOES HEREBY ADOPT** the Mitigated Negative Declaration for Conditional Use Permit #24-0024.

Rudy Schaffner, Commissioner
Imperial County Planning Commission

I hereby certified that the preceding Resolution was taken by the Planning Commission at a meeting conducted on **July 23, 2025,** by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Jim Minnick, Director of Planning & Development Services
Secretary to the Imperial County Planning Commission

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ATTACHMENT "D" – PC RESOLUTIONS

RESOLUTION NO. _____

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF IMPERIAL, CALIFORNIA, APPROVING "CONDITIONAL USE PERMIT #24-0024" FOR RASIRC IMPERIAL FACILITY.

WHEREAS, RASIRC has submitted an application for Conditional Use Permit #24-0024 the construction and operation of a Hydrazine processing facility; and,

WHEREAS, a Mitigated Negative Declaration and Findings have been prepared in accordance with the requirements of the California Environmental Quality Act, the State Guidelines, and the County's "Rules and Regulations to Implement CEQA, as Amended"; and,

WHEREAS, the Planning Commission of the County of Imperial has been delegated with the responsibility of approvals, adoptions and certifications; and,

WHEREAS, public notice of said application has been given, and the Planning Commission has considered evidence presented by the Imperial County Planning & Development Services Department and other interested parties at a public hearing held with respect to this item on July 23, 2025.

NOW, THEREFORE, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

SECTION 1. The Planning Commission has considered the proposed Conditional Use Permit #24-0024 prior to approval. The Planning Commission finds and determines that the Conditional Use Permit is adequately prepared in accordance with the requirements of the Imperial County General Plan, Land Use Ordinance, and the California Environmental Quality Act (CEQA) which analyzes environmental effects, based upon the following findings and determinations.

SECTION 2. That in accordance with State Planning and Zoning laws and the County of Imperial regulations, the following findings for approving Conditional Use Permit #24-0024 have been made as follows:

A. **The proposed use is consistent with goals and policies of the adopted County General Plan.**

The General Plan designates the subject site as part of the "Mesquite Lake Specific Plan Area" and is zoned "ML-I-2-RE" per Imperial County Land Use Ordinance and the Mesquite Lake Specific Plan. The project is found consistent with the goals and policies of the Imperial County General Plan Land Use Element and, therefore, consistent with the County's General Plan.

B. The proposed use is consistent with the purpose of the zone or sub-zone within which the use will be used.

The purpose of the project is to allow for the construction and operation of a Hydrazine processing facility. Minimum impact heavy manufacturing is an allowed use with an approved Conditional Use Permit and therefore is consistent with the purpose of the zone.

C. The proposed use is listed as a use within the zone or sub-zone or is found to be similar to a listed or similar conditional use according to the procedures of Section 90203.00.

A Hydrazine processing facility is an allowed use with an approved CUP for minimum impact heavy manufacturing per the Mesquite Lake Specific Plan, Chapter III, Section A "Land Use Plan".

D. The proposed use meets the minimum requirements of Title 9 applicable to the use and complies with all applicable laws, ordinances and regulations of the County of Imperial and the State of California.

The Project complies with the minimum requirements of Title 9 by obtaining a CUP pursuant to Mesquite Lake Specific Plan, Chapter III, Section A "Land Use Plan". The Conditions of Approval will continue to ensure that the project complies with all applicable regulations of the County of Imperial and the State of California.

E. The proposed use will not be detrimental to the health, safety, and welfare of the public or to the property and residents in the vicinity.

The project location is designated as part of the "Mesquite Lake Specific Plan Area" per the Imperial County General Plan. The surrounding areas are zoned ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay) and ML-I-3-RE (Mesquite Lake Heavy Industrial with Renewable Energy Overlay) and consist of vacant land towards east and west, a power plant towards south and a solar farm towards north. Complying with the established mitigation measures would result in the proposed use not being detrimental to the health, safety, and welfare of the public or to the property and residents in the vicinity.

F. The proposed use does not violate any other law or ordinance.

The project will continue to be subject to the Conditional Use Permit and current Federal, State, and Local regulations. The proposed use does not violate any law or ordinance.

G. The proposed use is not granting a special privilege.

The project is a permitted use subject to approval of a Conditional Use Permit #24-0024 under the Mesquite Laske Specific Plan, Chapter III, Section A "Land Use Plan", and will not grant a special privilege.

NOW, THEREFORE, based on the above findings, the County of Imperial Planning Commission **DOES HEREBY APPROVE** Conditional Use Permit #24-0024, subject to the attached Conditions of Approval.

Rudy Schaffner, Chairperson
Imperial County Planning Commission

I hereby certify that the preceding resolution was taken by the Planning Commission at a meeting conducted on **July 23, 2025**, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Jim Minnick, Director of Planning & Development Services
Secretary to the Planning Commission

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ATTACHMENT "E" – CUP #24-0024

CONDITIONS OF APPROVAL

Recorded Requested by and
When Recorded Return To:

Imperial County Planning & Development
Services Department
801 Main Street
El Centro, California 92243

AGREEMENT FOR CONDITIONAL USE PERMIT #24-0024
FOR RASIRC IMPERIAL FACILITY
Planning Commission Approved Conditions (X/X/2025)
Effective Date (X/X/2025)

Conditional Use Permit #24-0024 was approved by the Imperial County ☐ Planning Commission ☐ Board of Supervisors and has the Effective Date of X, X, 2025. This Conditional Use Permit is by and between RASIRC Inc. – (hereinafter referred to as "Permittee"), and the COUNTY OF IMPERIAL, a political subdivision of the State of California, (hereinafter referred to as "COUNTY").

RECITALS

WHEREAS, Permittee is the owner, lessee or successor in interest in certain land in Imperial County located at 3555 Old Highway 111, Imperial, CA 92251, Parcel 4 of Parcel Map 802 of TR 58 14-14 9.59 AC S.B.B.M, in an unincorporated area of the County of Imperial. The Assessor's Parcel Number is 040-250-024-000; and,

WHEREAS, Permittee has applied to the County for permission to construct and operate a Hydrazine processing facility; and,

WHEREAS, the County, after a notice public hearing, agreed to issue Conditional Use Permit #24-0024 to Permittee, and/or his or her successor in interest subject to the following conditions:

GENERAL CONDITIONS:

G-1 GENERAL LAWS:

The Permittee shall obtain, comply with and maintain all applicable County, State, and federal laws, rules, regulations, ordinances, and/or standards as they may pertain to this project whether specified herein or not.

G-2 EFFECTIVE DATE:

The approved Conditional Use Permit shall not become effective until all of the following occurs: (a.) The passage of ten (10) calendar days after the decision of the Planning Director or Commission; and, (b.) the applicable Conditional Use Permit conditions have been met; and (c.) the Conditional Use Permit is recorded by the Permittee or its agent with the County Recorder, with the payment of recording fees by applicant or its agent; and (d.) In the case of a decision by the Board of Supervisors there is no 10-day appeal.

G-3 RECORDATION:

CUP #24-0024 shall as set forth in General Condition "G-2", **not be effective** until it complies with General Condition "G-2", including being recorded by Permittee or its agent at the Imperial County Recorder's Office conditioned on there not being an appeal having been filed after the approval from the hearing body. Payment of the recordation fee shall be the responsibility of the Permittee. If this CUP is not recorded within one hundred eighty (180) days from the date of approval the CUP shall be deemed null and void, without notice having to be provided to the Permittee. The permittee may submit a written request for a recordation extension for this CUP by filing such a request with the Planning Director at least sixty (60) days prior to the one hundred eighty 180-day expiration. The Director may approve one (1) extension for a period not to exceed one hundred eighty (180) days. An extension may not be granted if the request for an extension is filed after the expiration date. Failure to record this CUP within one (1) year including the granted extension period shall deem this CUP null and void.

G-4 COMMENCEMENT OF WORK:

If the project for which a CUP has been approved has not commenced, or permits for said project have not been issued, within one (1) year from the effective date, the CUP shall be null and void. If an applicant cannot initiate or obtain permits for the approved use during the one (1) year, the applicant may request a one (1) year extension from the Department. The request for an extension shall be in writing and be submitted with explanation to the Planning & Development Services Department at least sixty days prior to the end of the extended one (1) year period. The Director shall have the authority to extend the initial start-up period, or commencement of work, of a CUP up to two (2) times for a maximum of two (2) years. Should the Permittee desire to continue with the project, a new application shall be submitted, and the entire process would have to begin anew.

G-5 TIME LIMIT:

Unless otherwise specified within the project's specific conditions **this CUP shall be limited to a maximum of five (5) years from the Effective Date of the CUP.** The CUP may be administratively extended for five (5) successive years by the Planning Director upon a finding by the Planning & Development Services Department that the project is in full and complete compliance with all conditions of the CUP and any applicable land use regulation(s) and extension fees of the County of Imperial. Unless specified otherwise herein no CUP shall be extended for more than two (2) consecutive periods. If an extension is necessary or requested beyond fifteen (15) years, Permittee shall file a written request with the Planning Director for a hearing before the Planning Commission. Such request shall include the appropriate extension fee. **An extension of this CUP shall not be granted if the project is in violation of any one or all of the conditions or if there is a history of non-compliance with the project conditions.**

G-6 ABANDONMENT:

If a CUP has been unused, abandoned, discontinued, or ceased for one (1) year, the CUP shall be null and void, and be of no effect. Notice to applicant/permittee under this division will not be required or provided by the Department.

G-7 PERMIT/LICENSE:

Permittee shall obtain and comply with any and all required permits, licenses, and/or approvals, for the construction and/or operation of this project. This shall include, but shall NOT be limited to, permits from the County Division of Environmental Health Services (EHS), Planning & Development Services Department, Office of Emergency Services (OES), Imperial County Air Pollution Control District (ICAPCD) and Public Works Department. The permittee shall likewise comply with all such permit requirements for the life of the project. **Additionally, the Permittee shall submit a copy of such additional permit(s)**

and/or license(s) to the Planning & Development Services Department within 60-days of receipt, including amendments or alternatives thereto.

G-8 APPROVALS AND CONDITIONS SUBSEQUENT TO GRANTING PERMIT:

Permittee acceptance of this CUP shall be deemed to constitute agreement with the terms and conditions contained herein. Where a requirement is imposed in this CUP that Permittee conduct a monitoring program, and where the County has reserved the right to impose or modify conditions with which the Permittee must comply based on data obtained therefrom, or where the Permittee is required to prepare specific plans for County approval and disagreement arises, the Permittee, operator and/or agent, the Planning and Development Services Director or other affected party, to be determined by the Planning and Development Services Director, may request that a hearing be conducted before the Imperial County Planning Commission whereby they may state the requirements which will implement the applicable conditions as intended herein. Upon receipt of a request, the Planning Commission shall conduct a hearing and make a written determination. The Planning Commission may request support and advice from a technical advisory committee. Failure to take any action shall constitute endorsement of staff's determination with respect to implementation.

G-9 CONDITION PRIORITY:

This project shall be constructed/operated as described in the CUP application, the environmental documents, the project description, and as specified in these conditions. Where a conflict occurs, the CUP conditions shall govern.

G-10 INDEMNIFICATION:

As part of this application, applicant and real party in interest, if different, agree to defend, indemnify, hold harmless, and release the County of Imperial ("County"), its agents, officers, attorneys, and employees (including consultants) from any claim, action, or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent negligence on the part of the County, its agents, officers, attorneys, or employees (including consultants).

If any claim, action, or proceeding is brought against the County, its agents, officers, attorneys, or employees (including consultants), to attack, set aside, void, or annul the approval of the application or adoption of the environmental document which accompanies it, then the following procedures shall apply:

1. The Planning Director shall promptly notify the County Board of Supervisors of any claim, action or proceeding brought by an applicant challenging the County's action. The County, its agents, attorneys and employees (including consultants) shall fully cooperate in the defense of that action.

2. The County shall have the final determination on how to best defend the case and will consult with applicant regularly regarding status and the plan for defense. The County will also consult and discuss with applicant the counsel to be used by County to defend it, either with in-house counsel, or by retaining outside counsel provided that the County shall have the final decision on the counsel retained to defend it. The applicant shall be fully responsible for all costs incurred. The applicant shell be entitled to provide his or her own counsel to defend the case, and said independent counsel shall work with County Counsel to provide a joint defense.

G-11 INSURANCE:

The Permittee shall take out and maintain workers compensation insurance as required by the State of California. The Permittee shall also secure liability insurance and such other insurance as required by state and/or federal law. A Certificate of Insurance is to be provided to the Planning and Development Services Department by the insurance carrier, and said insurance and certificate shall be kept current for the life of the project. Certificates of Insurance shall be sent directly to the Planning and Development Services Department by the insurance carrier and shall name the Department as a recipient of both renewal and cancellation notices.

G-12 RIGHT OF ENTRY:

The County reserves the right to enter the premises at any time, announced or unannounced, in order to make the appropriate inspection(s) and to determine if the condition(s) of this CUP are complied with. Access by authorized enforcement agency personnel shall not be denied.

G-13 SEVERABILITY:

Should any condition(s) of this CUP be determined by a Court or other agency with proper jurisdiction to be invalid for any reason, such determination shall not invalidate the remaining provision(s) of this CUP.

G-14 PROVISION TO RUN WITH LAND:

The provisions of this CUP are to run with the land/project and shall bind the current and future owner(s) successor(s) of interest; assignee(s) and/or transferee(s) of said CUP. **The permittee shall not without prior notification to the Planning & Development Services Department assign, sell, or transfer, or grant control of CUP or any right or privilege therein.** The Permittee shall provide a minimum of

60 days written notice prior to such proposed transfer becoming effective. The permitted use identified herein is limited for use upon this parcel described herein and may not be transferred to another parcel.

G-15 COMPLIANCE/REVOCATION:

Upon the determination by the Planning & Development Services Department that the project is or may not be in full compliance with any one or all of the conditions of this CUP, or upon the finding that the project is creating a nuisance as defined by law, the issue shall be brought immediately to the appropriate enforcement agency or to the Planning Commission for hearing to consider appropriate response including but not limited to the revocation of the CUP or to consider possible amendments to the CUP. The hearing shall be held upon due notice having been provided to the Permittee and to the public in accordance with established ordinance/policy.

G-16 NON-COMPLIANCE (ENFORCEMENT & TERMINATION):

Should the Permittee violate any condition herein, the County shall give written notice of such violations and actions required of the Permittee to correct such violation. If the Permittee does not act to correct the identified violation within forty-five (45) days after written notice, County may revoke the CUP. If Permittee pursues correction of such violation with reasonable diligence, the County may extend the cure period. Upon such revocation, County may, at its sole discretion, cease processing, defending any lawsuit or paying for costs associated with the Project.

G-17 COSTS:

Permittee shall pay any and all amounts determined by the County to defray any and all cost(s) for the review of reports, field investigations, monitoring, and other activities directly related to the enforcement/monitoring for compliance of this CUP, County Ordinance or any other applicable law. Any billing against this project, now or in the future, by the Planning & Development Services Department or any County Department for costs incurred as a result of this CUP, shall be billed through the Planning & Development Services Department.

G-18 REPORT(S)

The Permittee shall file an annual report with the Planning and Development Services Department to show that the Permittee is in full compliance with this CUP. The report shall be filed at least fifteen (15) days prior to the anniversary (recordation date) of this CUP. It shall be the responsibility of the Permittee to provide all reports and to include the information about other users. The County may request information at any time from the Permittee or other users if applicable;

however, it shall be the responsibility of the Permittee to assure that the County receives such information in a timely manner.

G-19 RESPONSIBLE AGENT

The Permittee shall maintain on file with the Planning and Development Services Department, the name and phone number of the responsible agent for the site. A back-up name shall also be provided, and a phone number for twenty-four (24) hour emergency contact shall also be on file. If there are other users, the same information (as applicable) required from the Permittee shall also be made available to the County from such other users.

G-20 WATER AND SEWER:

The Permittee shall provide water and sewer to Federal, State and County standards. Water and sewer systems shall be approved by the Environmental Health Services and the Planning & Development Services Department. Permittee shall hook up to a public water system or supplier if and when available.

G-21 DEFINITIONS:

In the event of a dispute, the meaning(s) or the intent of any word(s) phrase(s) and/or conditions or sections herein shall be determined by the Planning Commission of the County of Imperial. Their determination shall be final unless an appeal is made to the Board of Supervisors ten (10) days from the date of their decision.

G-22 SPECIFICITY:

The issuance of this CUP does not authorize the Permittee to construct or operate this project in violation of any state, federal, local law nor beyond the specified boundaries of the project as shown in the application/project description/ CUP, nor shall this CUP allow any accessory or ancillary use not specified herein. This CUP does not provide any prescriptive rights or use to the Permittee for future addition and/or modification to this project.

G-23 HEALTH HAZARD:

If the County Health Officer determines that a significant health hazard exists to the public, the County Health Officer may require appropriate measures, and the Permittee shall implement such measures to mitigate the health hazard. If the hazard to the public is determined to be imminent, such measures may be imposed immediately and may include temporary suspension of the subject operations. However, within forty-five (45) days of any such suspension of operations, the measures imposed by the County Health Officer must be submitted to the Planning Commission for review and approval. Nothing shall prohibit the Permittee from

requesting a special Planning Commission meeting provided Permittee bears all costs.

G-24 CHANGE OF OWNER/OPERATOR:

In the event the ownership of the site or the operation of the site transfers from the current Permittee to a new successor Permittee, the successor Permittee shall be bound by all terms and conditions of this CUP as if said successor was the original Permittee. The current Permittee shall inform the County Planning & Development Services Department in writing at least sixty (60) days prior to any such transfer. Failure of a notice of change of ownership or change of operator shall be grounds for the immediate revocation of the CUP. In the event of a change, the new Owner/Operator shall file with the Department, via certified mail, a letter stating that they are fully aware of all conditions and acknowledge that they will adhere to all.

G-25 PERMITS OF OTHER AGENCIES INCORPORATED:

Permits granted by other governmental agencies in connection with the Project are incorporated herein by reference. The County reserves the right to apply conditions of those permits, as the County deems appropriate; provided, however, that enforcement of a permit granted by another governmental agency shall require concurrence by the respective agency. The Permittee shall provide to the County, upon request, copies and amendments of all such permits.

G-26 MINOR AMENDMENTS:

The Planning Director may approve minor changes or administrative extensions, as requested in writing by the Permittee, provided it does not result in additional environmental impacts and/or are generally procedural or technical and/or which may be necessary to comply with other government permit compliance requirements.

(TOTAL "G" CONDITIONS are 26)

This space intentionally left blank.

PROJECT SPECIFIC CONDITIONS:

S-1 PROJECT DESCRIPTION:

The CUP authorizes the Permittee to construct and operate a N2H4 (Hydrazine) processing facility. The facility will include storage metal containers with appropriate cabinets and containers for raw chemical materials and waste, detached from the main building and constructed to store chemicals safely. The proposed building will be a total of 7,000 sq. ft. This building will be a warehouse facility with an office, parking, and site improvements. The building will have driveway access from Old Highway 111. This project will be located at property identified under Assessor's Parcel Number (APN) 040-250-024-000, within the Mesquite Lake Specific Plan area. A total of 4 to 12 employees will be working in the warehouse/office, with daily operating hours estimated to be from 7:00 am to 5:00 pm approximately.

S-2 AESTHETICS:

The applicant shall comply with Imperial County Title 9 Land Use Ordinance and the Mesquite Lake Specific Plan Area regulations; and a design review must be submitted and approved by the Imperial County Planning & Development Services Department before any building permit can be issued.

S-3 ACCESS TO SITE:

Access to the site shall be from Old Highway 111.

S-4 LIGHT & GLARE:

The permittee is allowed to have security as well as operational lighting, in accordance with Title 9, Land Use Ordinance, Section 90301.02-K. Said lighting shall be shielded and directed to on-site areas only to minimize off-site impacts due to unacceptable levels of light or glare.

S-5 FENCING:

Security fencing shall be required to conform to Imperial County Land Use Ordinance requirements.

S-6 MAINTENANCE OF YARD:

The Hydrazine processing facility shall be kept free of rubbish, in an organized manner, with all internal roadways and site access maintained free of rubbish and debris.

S-7 PERMITS:

The Permittee shall secure all necessary building permits and other required permits from the Planning & Development Services Department and other applicable Departments/Agencies for utilities and installation of any structures.

S-8 IMPERIAL COUNTY FIRE DEPARTMENT:1

A. Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right -of-way not less than 20 feet in width.

B. Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503. A minimum of two points of entry shall be provided into the project site.

C. KNOX Box and/or Locks will be required for all access gates and building entry as determined by the Imperial County Fire Department.

D. An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code Shall be installed and maintained. (Minimum fire flow of 1500 GPM for 2 hours) Private fire service mains and appurtenance shall be installed in accordance with NFPA 20, 22, 24.

E. An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code Chapter 9. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.

F. Hazard identification and signs shall be provided as required by the California Fire Code and NFPA.

G. Hazardous material leak and/or release mitigation equipment shall be onsite in an approved location determined by Imperial County Fire Department officials. Additional equipment may be required upon review.

H. Compliance with all required sections of the fire code.

I. Applicants shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.

J. An emergency response/action plan shall be prepared and approved by the Imperial County Fire/OES Department.

1 Imperial County Fire Department comment letter dated: Oct 24, 2024

K. A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.

L. A Hazardous Waste Material Plan shall be submitted to the Certified Unified Program Agency (CUPA) for their review and approval.

M. All hazardous material and waste shall be handled, stored, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to the Imperial County Fire Department and CUPA and required by the Hazardous Waste Material Plan.

N. The applicant shall provide cost reimbursement for direct fire protection and hazardous material response services. Service rate will be consistent with Imperial County Fire Department adopted fee schedule. Cost reimbursement will be from time of call to the conclusion of the incident as defined by the fire department.

S-9 AIR POLLUTION CONTROL DISTRICT:[2]

A. The Permittee shall show compliance with the APCD letter dated October 15, 2024[2], stating that the project and any future construction must comply with all Air District rules and regulations, emphasizing on Regulation VIII – Fugitive Dust Rules, a collection of rules designed to maintain fugitive dust emissions below 20% visual opacity.

B. The Permittee shall contact the Air District and obtain any required Air Permits.

S-10 PUBLIC WORKS:[3]

The permittee shall show compliance with ICPW letter dated February 25, 2025[3]. Which provided the following conditions:

A. A trip generation and distribution analysis report shall be prepared by a traffic engineer licensed in the State of California and submitted to the Department of Public Works for review and approval. Existing traffic counts on Old Highway 111 south of Keystone Road and Keystone Road west of Old Highway 111 shall be obtained and included in the analysis report. The analysis report shall include fair share calculations related to the project's traffic impacts within the Mesquite Lake Specific Plan Area. The Applicant shall be responsible for the fair share contributions identified on this report. The trip generation and distribution

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2 Imperial County Air Pollution Control District letter dated October 15, 2024

3 Imperial County Department of Public Works letter dated February 24, 2025

analysis report shall be submitted to this Department prior to issuance of Building Permit. The fair share contributions shall be paid to this Department prior to the issuance of the Certificate of Occupancy.

B. The Applicant shall furnish a Drainage and Grading Plan/Study to provide for property grading and drainage control, which shall also include prevention of sedimentation of damage to off-site properties. The Study/Plan shall be submitted to the Department of Public Works for review and approval. The applicant shall implement the approved plan. Employment of the appropriate Best Management Practices (BMP's) should be included (Per Imperial County Code of Ordinances, Chapter 12.10.020 B).

C. An encroachment permit shall be secured from the Public Works department for any construction and/or construction related activities within County Right-of-Way. Activities to be covered under an encroachment permit shall include the installation of, but not be limited to, stabilized construction entrances, driveways, road improvements, temporary traffic control devices, etc.

D. Prior to the issuance of grading and building permits, a stabilized construction entrance shall be installed under an encroachment permit from this department.

E. The Developer shall repair any damage caused to Imperial County Roads during construction and maintain such roads in safe conditions as determined by the Imperial County Road Commissioner. Said road repairs shall be completed under an encroachment permit from this department.

F. All off-site improvements within Imperial County right-of-way shall be financially secured by either a road improvement bond or letter of credit and approved by this department. No encroachment, building or grading permits shall be issued until such time said financial security has been provided.

G. All permanent structures abutting public roads shall be located outside County right-of-way, public utility easements, and drainage easements.

H. All on-site traffic areas shall be hard surfaced to provide all weather access for emergency vehicles. The surfacing shall meet the Department of Public Works and Fire/Office of Emergency Services (EOS) Standards as well as those the Air Pollution Control District (APCD).

I. A Transportation Permit may be required from road agencies having jurisdiction over the haul route(s) for any hauls of heavy equipment and/or large vehicles which impose greater than legal loads on riding surfaces, including bridges. (Per Imperial County Code of Ordinances, Chapter 10.12 – Overweight Vehicles and Loads).

S-11 AGRICULTURE COMMISSION:[4]

The permittee shall show compliance with the Office of the Agricultural Commissioner Sealer of Weights and Measures letter dated March 15, 2025[4].

S-12 DEPT. OF FISH AND WILDLIFE:[5]

The permittee shall comply with mitigation measure MM BIO-1 as recommended by the California Department of Fish and Wildlife in their comment letter dated June 03, 2025[5].

MM BIO-1 (Western Burrowing Owl Surveys, Avoidance, Minimization and Mitigation:

Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (CDFG, 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals.

Focused Burrowing Owl Surveys

To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG, 2012). The survey shall cover the Project site and a 150-meter (500-foot) buffer, where legally accessible. The Project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan (see below) to allow commencement of disturbance activities on site. A preconstruction survey shall be conducted within 14 days prior to the start of construction activities (see below).

Pre-construction Survey

Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the Project footprint. A

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4 County Agriculture Commission Office letter dated March 15, 2025.

5 Dept. of Fish and Wildlife letter dated June 3, 2025

report shall be submitted by a qualified and agency-approved biologist to CDFW. The Project footprint shall be clearly demarcated in the field by the Project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the guidance of the Staff Report on Burrowing Owl Mitigation (CDFG, 2012).

Avoidance and Mitigation

Depending on the Project activity type and associated disturbance, a minimum avoidance buffer distance of 50 meters (165 feet) to 100 meters (330 feet) during the nonbreeding season (September through January) and 100 meters (330 feet) to 250 meters (825 feet) during the breeding season (February through August) shall be maintained between active burrows and construction activities. A qualified biologist shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.

If active burrows are present within the Project footprint and complete avoidance is infeasible, the Project proponent shall not undertake Project activities and Project activities shall be postponed until the appropriate authorization (i.e. CESA incidental take permit under the California Fish and Game Code § 2081) is obtained.

If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to exclude the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG, 2012) and a CDFW-approved Burrowing Owl Protection and Mitigation Plan. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit signs of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the Project shall be excavated and filled in to prevent their reuse. Off-site "replacement burrow site(s)" must consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated. As the Project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and mitigation shall only be completed upon prior approval by and in coordination with CDFW. The Burrowing Owl Protection and Mitigation Plan shall include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the Project applicant. For the purposes of

this mitigation measure, a "qualified biologist" is a biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW.

(TOTAL "S" CONDITIONS are 12)

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NOW THEREFORE, County hereby issues Conditional Use Permit #24-0024 and Permittee hereby accepts such permit upon the terms and conditions set forth herein.

IN WITNESS THEREOF, the parties hereto have executed this Agreement the day and year first written.

PERMITTEE:

By:_____

Kevin Selby, Head of Manufacturing, Safety, Health And Environment
RASIRC Inc.

_____
Date

COUNTY OF IMPERIAL, a political subdivision of the STATE OF CALIFORNIA:

By:_____

JAMES MINNICK, Director
Planning & Development Services Department

_____
Date

FOR PERMITTEE NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____} S.S.

On _____before me, _____, a Notary Public in and for said County and State, personally appeared_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____
Number of Pages_____Date of Document_____
Signer(s) Other Than Named Above_____
Dated_____

FOR COUNTY NOTARIZATION

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF IMPERIAL} S.S.

On_____ before me, _____ a Notary Public in and for said County and State, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature_____

_____

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

Title or Type of Document_____

Number of Pages_____Date of Document_____

Signer(s) Other Than Named Above_____

ATTACHMENT "F" – MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM

Introduction

The Mitigation Monitoring and Reporting Program (MMRP) supplements the Initial Study/Mitigated Negative Declaration (IS/MND) for the proposed Hydrazine processing facility by providing a mechanism by which all measures in the IS/MND are implemented. The MMRP will be adopted by the County of Imperial Planning Commission in conjunction with the Project.

Purpose of the Mitigation Monitoring and Reporting Program

As the lead agency, the County is responsible for implementing the MMRP, which has been prepared in conformance with Section 21081.6 of the California Public Resources Code as identified below:

> (a) When making the findings required by paragraph (1) of subdivision (a) of Section 21081 or when adopting a mitigated negative declaration pursuant to paragraph (2) of subdivision (c) of Section 21080, the following requirements shall apply:
>
> > (1) The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.
> >
> > (2) The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.

The MMRP consists of mitigation measures that avoid, reduce, or fully mitigate potential environmental impacts. The mitigation measures have been identified and recommended through preparation of the IS/MND and drafted to meet the requirements of the California Environmental Quality Act (CEQA) Guidelines, Section 15097.

Mitigation Monitoring and Reporting Program Table

Project-specific mitigation measures are contained in the MMRP Table below. The table describes the specific mitigation measures, the responsible party that must comply with the mitigation measure, the regulatory agency having approval of and oversight over the mitigation measure, and the mitigation timeframe describing the timing and/or time range that applies to the mitigation measure. The MMRP will serve as the basis for scheduling the implementation of and compliance with all mitigation measures.

RASIRC IMPERIAL FACILITY
CONDITIONAL USE PERMIT (CUP) #24-0024 / INITIAL STUDY (IS) #24-0034
MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	RESPONSIBLE PARTY	REGULATORY AGENCY	MITIGATION TIMEFRAME
SECTION III. AIR QUALITY			
MM AQ-1: The applicant must provide a Health Risk Assessment (HRA) referencing the current CEQA Air Quality Handbook for Imperial County. An Air District Permit and an application for engineering review of the project will need to be submitted along with the design specifications and the HRA for review by the Air Pollution Control District. Any relative humane exposure, location of the project, distance to sensitive receptors should be considered when developing the risk assessment.	RASIRC INC.	Imperial County	Prior to Planning Commission
SECTION IV. BIOLOGICAL RESOURCES			
MM BIO-1: Western Burrowing Owl Surveys, Avoidance, Minimization, and Mitigation Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (CDFG, 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. Focused Burrowing Owl Surveys To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG, 2012). The survey shall cover the Project site and a 150-meter (500-foot) buffer, where legally accessible. The Project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan (see below) to allow commencement of disturbance activities on site. A preconstruction survey shall be conducted within 14 days prior to the start of construction activities (see below). Pre-construction Survey Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the Project footprint. A report shall be submitted by a qualified and agency-approved biologist to CDFW. The Project footprint shall be clearly demarcated in the field by the Project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the guidance of the Staff Report on Burrowing Owl Mitigation (CDFG, 2012). Avoidance and Mitigation Depending on the Project activity type and associated disturbance, a minimum avoidance buffer distance of 50 meters (165 feet) to 100 meters (330 feet) during the nonbreeding season (September through January) and 100 meters (330 feet) to 250 meters (825 feet) during the breeding season (February through August) shall be maintained between active burrows and construction activities. A qualified biologist shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs. If active burrows are present within the Project footprint and complete avoidance is infeasible, the Project proponent shall not undertake Project activities and Project activities shall be postponed until the appropriate authorization (i.e. CESA incidental take permit under the California Fish and Game Code § 2081) is obtained. If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to exclude the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG, 2012) and a CDFW-approved Burrowing Owl Protection and Mitigation Plan. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit sign of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the Project shall be excavated and filled in to prevent their reuse. Off-site "replacement burrow	RASIRC INC.	Imperial County, California Department of Fish & Wildlife (CDFW), US Fish & Wildlife Service (USFWS)	Prior to the start of Project related activities

site(s)" must consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated. As the Project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and mitigation shall only be completed upon prior approval by and in coordination with CDFW. The Burrowing Owl Protection and Mitigation Plan shall include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the Project applicant. For the purposes of this mitigation measure, a "qualified biologist" is a biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW. ~~Prior to grading or construction, an initial survey to determine the presence of burrowing owls shall be conducted between February and September by a biologist that has been determined by the USFWS as qualified to conduct burrowing owl surveys. The survey shall be conducted in accordance with the latest USFWS approved guidelines. A report on the results of the survey and recommended avoidance or mitigation measures shall be provided by the applicant to the USFWS, CDFW, and Imperial County Planning and Development Services Department. No clearing or ground disturbing activities may be taken until the report and recommendations have been accepted by the USFWS, CDFG, and Imperial County Planning and Development Services Department. All burrowing owls found on the project site shall be tagged by USFWS qualified burrowing owl biologist.~~ ~~If burrowing owl burrows are found present within construction areas and a 50-meter (165-foot) boundary of construction limits, avoidance is the preferred level of mitigation. If avoidance cannot be met, or no burrowing owls were detected during the first survey, a second survey shall be conducted no less than 30 days prior to any clearing, ground disturbance, or demolition of existing structures. If no burrowing owls are present, a third survey shall be conducted no less than five days prior to the commencement of construction and, if no burrowing owls are present, clearing, grading, demolition, or construction may commence. If burrowing owls were present at the time of the second survey and CDFW and USFWS Office of Law Enforcement concur, on-site passive relocation can be implemented. The project biologist shall evaluate the suitability of nearby habitat, the availability of an existing or constructed alternate burrow for each burrow excavated, and the opportunity for preservation of the site, such as through a conservation easement that would be managed to promote burrowing owl use of the site. Relocation requires that owls should be excluded flow burrows in the immediate impact zone and 50-meter buffer zone by installing one-way doors in burrow entrances, left in place for 48 hours before excavation. Relocation of owls should only be implemented during the nonbreeding season.~~			

ATTACHMENT "G" – EEC ORIGINAL PACKAGE

PROJECT REPORT

TO: ENVIRONMENTAL EVALUATION COMMITTEE **AGENDA DATE: April 24, 2025**

FROM: PLANNING & DEVELOPMENT SERVICES **AGENDA TIME 1:30 PM / No.3**

PROJECT TYPE: RASIRC Imperial Facility CUP #24-0024 / IS #24-0034 SUPERVISOR DIST #5

LOCATION: 3555 Old Highway 111 APN: 040-250-024-000

Imperial, CA 92251 PARCEL SIZE: 9.59 AC

GENERAL PLAN (existing) Mesquite Lake Specific Plan GENERAL PLAN (proposed) N/A

ZONE (existing) ML-I-2-RE ZONE (proposed) N/A

GENERAL PLAN FINDINGS ☒ CONSISTENT ☐ INCONSISTENT ☐ MAY BE/FINDINGS

PLANNING COMMISSION DECISION: HEARING DATE: _____

☐ APPROVED ☐ DENIED ☐ OTHER

PLANNING DIRECTORS DECISION: HEARING DATE: _____

☐ APPROVED ☐ DENIED ☐ OTHER

ENVIROMENTAL EVALUATION COMMITTEE DECISION: HEARING DATE: 04/24/2025

INITIAL STUDY: #24-0034

☐ NEGATIVE DECLARATION ☒ MITIGATED NEG. DECLARATION ☐ EIR

DEPARTMENTAL REPORTS / APPROVALS:

PUBLIC WORKS	☐ NONE	☒ ATTACHED
AG	☒ NONE	☐ ATTACHED
APCD	☐ NONE	☒ ATTACHED
E.H.S.	☒ NONE	☐ ATTACHED
FIRE / OES	☐ NONE	☒ ATTACHED
SHERIFF	☒ NONE	☐ ATTACHED
OTHER	Imperial Irrigation District (IID), CEO, Yuma Quechan Indian Tribe	

REQUESTED ACTION:

(See Attached)

Planning & Development Services
801 MAIN STREET, EL CENTRO, CA, 92243 442-265-1736
(Jim Minnick, Director)

EEC ORIGINAL PKG

☐ NEGATIVE DECLARATION
☒ MITIGATED NEGATIVE DECLARATION

Initial Study & Environmental Analysis
For:

Conditional Use Permit (CUP) #24-0024
Initial Study (IS) #24-0034
RASIRC Imperial Facility

Prepared By:

COUNTY OF IMPERIAL
Planning & Development Services Department
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April 2025

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SECTION 1
INTRODUCTION

A. PURPOSE

This document is a ☐ policy-level, ☒ project level Initial Study for evaluation of potential environmental impacts resulting with the proposed project, Hydrazine Facility (Refer to Exhibit "A" & "B").

B. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REQUIREMENTS AND THE IMPERIAL COUNTY'S GUIDELINES FOR IMPLEMENTING CEQA

As defined by Section 15063 of the State California Environmental Quality Act (CEQA) Guidelines and Section 7 of the County's "CEQA Regulations Guidelines for the Implementation of CEQA, as amended", an **Initial Study** is prepared primarily to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report (EIR), Negative Declaration, or Mitigated Negative Declaration would be appropriate for providing the necessary environmental documentation and clearance for any proposed project.

☐ According to Section 15065, an **EIR** is deemed appropriate for a particular proposal if the following conditions occur:

- The proposal has the potential to substantially degrade quality of the environment.
- The proposal has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The proposal has possible environmental effects that are individually limited but cumulatively considerable.
- The proposal could cause direct or indirect adverse effects on human beings.

☐ According to Section 15070(a), a **Negative Declaration** is deemed appropriate if the proposal would not result in any significant effect on the environment.

☐ According to Section 15070(b), a **Mitigated Negative Declaration** is deemed appropriate if it is determined that though a proposal could result in a significant effect, mitigation measures are available to reduce these significant effects to insignificant levels.

This Initial Study has determined that the proposed applications will not result in any potentially significant environmental impacts and therefore, a Negative Declaration is deemed as the appropriate document to provide necessary environmental evaluations and clearance as identified hereinafter.

This Initial Study and Negative Declaration are prepared in conformance with the California Environmental Quality Act of 1970, as amended (Public Resources Code, Section 21000 et. seq.); Section 15070 of the State & County of Imperial's Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended (California Code of Regulations, Title 14, Chapter 3, Section 15000, et. seq.); applicable requirements of the County of Imperial; and the regulations, requirements, and procedures of any other responsible public agency or an agency with jurisdiction by law.

Pursuant to the County of Imperial Guidelines for Implementing CEQA, depending on the project scope, the County of Imperial Board of Supervisors, Planning Commission and/or Planning Director is designated the Lead Agency, in accordance with Section 15050 of the CEQA Guidelines. The Lead Agency is the public agency which has the

principal responsibility for approving the necessary environmental clearances and analyses for any project in the County.

C. INTENDED USES OF INITIAL STUDY AND NEGATIVE DECLARATION

This Initial Study and Negative Declaration are informational documents which are intended to inform County of Imperial decision makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed applications. The environmental review process has been established to enable public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any potentially adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including economic and social goals.

The Initial Study and Negative Declaration, prepared for the project will be circulated for a period of 20 days (*30-days if submitted to the State Clearinghouse for a project of area-wide significance*) for public and agency review and comments. At the conclusion, if comments are received, the County Planning & Development Services Department will prepare a document entitled "Responses to Comments" which will be forwarded to any commenting entity and be made part of the record within 10-days of any project consideration.

D. CONTENTS OF INITIAL STUDY & NEGATIVE DECLARATION

This Initial Study is organized to facilitate a basic understanding of the existing setting and environmental implications of the proposed applications.

SECTION 1

I. INTRODUCTION presents an introduction to the entire report. This section discusses the environmental process, scope of environmental review, and incorporation by reference documents.

SECTION 2

II. ENVIRONMENTAL CHECKLIST FORM contains the County's Environmental Checklist Form. The checklist form presents results of the environmental evaluation for the proposed applications and those issue areas that would have either a potentially significant impact, potentially significant unless mitigation incorporated, less than significant impact or no impact.

PROJECT SUMMARY, LOCATION AND EVIRONMENTAL SETTINGS describes the proposed project entitlements and required applications. A description of discretionary approvals and permits required for project implementation is also included. It also identifies the location of the project and a general description of the surrounding environmental settings.

ENVIRONMENTAL ANALYSIS evaluates each response provided in the environmental checklist form. Each response checked in the checklist form is discussed and supported with sufficient data and analysis as necessary. As appropriate, each response discussion describes and identifies specific impacts anticipated with project implementation.

SECTION 3

III. MANDATORY FINDINGS presents Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

IV. PERSONS AND ORGANIZATIONS CONSULTED identifies those persons consulted and involved in

preparation of this Initial Study and Negative Declaration.

V. REFERENCES lists bibliographical materials used in preparation of this document.

VI. NEGATIVE DECLARATION – COUNTY OF IMPERIAL

VII. FINDINGS

SECTION 4

VIII. RESPONSE TO COMMENTS (IF ANY)

IX. MITIGATION MONITORING & REPORTING PROGRAM (MMRP) (IF ANY)

E. SCOPE OF ENVIRONMENTAL ANALYSIS

For evaluation of environmental impacts, each question from the Environmental Checklist Form is summarized and responses are provided according to the analysis undertaken as part of the Initial Study. Impacts and effects will be evaluated and quantified, when appropriate. To each question, there are four possible responses, including:

1. **No Impact:** A "No Impact" response is adequately supported if the impact simply does not apply to the proposed applications.

2. **Less Than Significant Impact:** The proposed applications will have the potential to impact the environment. These impacts, however, will be less than significant; no additional analysis is required.

3. **Potentially Significant Unless Mitigation Incorporated:** This applies where incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact".

4. **Potentially Significant Impact:** The proposed applications could have impacts that are considered significant. Additional analyses and possibly an EIR could be required to identify mitigation measures that could reduce these impacts to less than significant levels.

F. POLICY-LEVEL or PROJECT LEVEL ENVIRONMENTAL ANALYSIS

This Initial Study and Negative Declaration will be conducted under a ☐ policy-level, ☒ project level analysis. Regarding mitigation measures, it is not the intent of this document to "overlap" or restate conditions of approval that are commonly established for future known projects or the proposed applications. Additionally, those other standard requirements and regulations that any development must comply with, that are outside the County's jurisdiction, are also not considered mitigation measures and therefore, will not be identified in this document.

G. TIERED DOCUMENTS AND INCORPORATION BY REFERENCE

Information, findings, and conclusions contained in this document are based on incorporation by reference of tiered documentation, which are discussed in the following section.

1. Tiered Documents

As permitted in Section 15152(a) of the CEQA Guidelines, information and discussions from other documents can be included into this document. Tiering is defined as follows:

"Tiering refers to using the analysis of general matters contained in a broader EIR (such as the one prepared

for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project."

Tiering also allows this document to comply with Section 15152(b) of the CEQA Guidelines, which discourages redundant analyses, as follows:

"Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including the general plans, zoning changes, and development projects. This approach can eliminate repetitive discussion of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration."

Further, Section 15152(d) of the CEQA Guidelines states:

"Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

(1) Were not examined as significant effects on the environment in the prior EIR; or

(2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means."

2. Incorporation By Reference

Incorporation by reference is a procedure for reducing the size of EIRs/MND and is most appropriate for including long, descriptive, or technical materials that provide general background information, but do not contribute directly to the specific analysis of the project itself. This procedure is particularly useful when an EIR or Negative Declaration relies on a broadly-drafted EIR for its evaluation of cumulative impacts of related projects (*Las Virgenes Homeowners Federation v. County of Los Angeles* [1986, 177 Ca.3d 300]). If an EIR or Negative Declaration relies on information from a supporting study that is available to the public, the EIR or Negative Declaration cannot be deemed unsupported by evidence or analysis (*San Francisco Ecology Center v. City and County of San Francisco* [1975, 48 Ca.3d 584, 595]). This document incorporates by reference appropriate information from the "Final Environmental Impact Report and Environmental Assessment for the "County of Imperial General Plan EIR" prepared by Brian F. Mooney Associates in 1993 and updates.

When an EIR or Negative Declaration incorporates a document by reference, the incorporation must comply with Section 15150 of the CEQA Guidelines as follows:

- The incorporated document must be available to the public or be a matter of public record (CEQA Guidelines Section 15150[a]). The General Plan EIR and updates are available, along with this document, at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (442) 265-1736.

- This document must be available for inspection by the public at an office of the lead agency (CEQA Guidelines Section 15150[b]). These documents are available at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (442) 265-1736.

- These documents must summarize the portion of the document being incorporated by reference or briefly

describe information that cannot be summarized. Furthermore, these documents must describe the relationship between the incorporated information and the analysis in the tiered documents (CEQA Guidelines Section 15150[c]). As discussed above, the tiered EIRs address the entire project site and provide background and inventory information and data which apply to the project site. Incorporated information and/or data will be cited in the appropriate sections.

- These documents must include the State identification number of the incorporated documents (CEQA Guidelines Section 15150[d]). The State Clearinghouse Number for the County of Imperial General Plan EIR is SCH #93011023.

- The material to be incorporated in this document will include general background information (CEQA Guidelines Section 15150[f]). This has been previously discussed in this document.

II. Environmental Checklist

1. **Project Title**: RASIRC Imperial Facility - Conditional Use Permit (CUP) #24-0024 / Initial Study (IS) #24-0034
2. **Lead Agency**: Imperial County Planning & Development Services Department
3. **Contact person and phone number**: Luis Bejarano, Planner I, (442)265-1736, ext. 1745
4. **Address**: 801 Main Street, El Centro CA, 92243
5. **E-mail**: luisbejarano@co.imperial.ca.us
6. **Project location**: 3555 Old Highway 111, Imperial, CA 92251
7. **Project sponsor's name and address**: Duggins Construction Inc; 341 W Crown Court, Imperial, CA 92251
8. **General Plan designation**: Mesquite Lake Specific Plan
9. **Zoning**: ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay)
10. **Description of project**:

The applicant submitted a Conditional Use Permit application (CUP #24-0024) for a N2H4 (Hydrazine) processing facility, with Initial Study #24-0034. The proposed building will be a total of 7,000 ft^2. This building will be a warehouse facility with an office, parking, and site improvements. The building will have a driveway access from Old Highway 111. This project will be located at property identified under Assessor's Parcel Number (APN) 040-250-024-000, within the Mesquite Lake Specific Plan area.

The proposed N2H4 (Hydrazine) processing facility will be built ensuring safe handling, efficient production, and compliance with industry standards. The facility will include storage metal containers with appropriate cabinets and containers for raw chemical materials and waste, detached from the main building and constructed to store chemicals safely. The hydra-storage is required near the building because there is going to be a double wall pipe (to prevent leaks) connected from the storage to the building to route the hydrazine for processing. The office portion of the building is located at the east side, near the parking lot. A total of 4 to 12 employees will be working in the warehouse/office, with daily operating hours estimated to be from 7:00 am to 5:00 pm approximately.

This site will provide 15 automobile parking stalls as required by the County of Imperial zoning ordinance. A box delivery truck (UPS truck) will have access to the unloading area for shipping and receiving, approximately 5 to 10 times a month.

Employees' responsibilities will cover facilities and safety management, production management and process control. The facility will be a secure, closed environment with access-controlled building (badging) inside a fenced environment (gated entry).

The facilities operations consist of receiving low grade Hydrazine chemical shipped under UN 2029 that typically has contaminates and moisture levels in the 0.01% range of the total composition. This hydrazine is then purified and dried so that the moisture levels are less than 0.0000001% of the total composition. This level of purity is necessary for many of the stringent requirements in semiconductor manufacturing.

The applied process for the purification of the Hydrazine consists of passing the Hydrazine through moisture absorbing inert media until high purity levels are obtained. Once the purity is established, the "dry" Hydrazine gets transferred into small vessels filled with an inert dried solvent material which are then packaged and shipped using standard IATA and DOT dangerous goods shipping practices. The purified hydrazine is trademarked as Brute ® Hydrazine. Hazardous waste will be collected and properly disposed of by a licensed third-party company.

11. **Surrounding land uses and setting**:

The proposed parcel is zoned as ML-I-2-RE (Mesquite Lake Medium Industrial with a Renewable Energy Overlay), as identified on the Mesquite Lake Specific Plan, and is currently an undeveloped dirt parcel. The north side of the property abuts an ML-I-2-RE (Mesquite Lake Medium Industrial with a Renewable Energy Overlay) parcel containing a solar plant. The east of the property abuts Old Highway 111, and across the Highway 111, an undeveloped ML-I-2-RE (Mesquite Lake Medium Industrial with a Renewable Energy Overlay) parcel. The West side of the property abuts an

undeveloped dirt parcel zoned as ML-I-3-RE (Mesquite Lake Heavy Industrial with a Renewable Energy Overlay). Lastly, the South of the property abuts the Redwood lateral & Mesquite Lake Water and Power Plant within a parcel zoned as ML-I-3-RE.

12. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.): Planning Commission

13. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentially, etc.?

AB52 Opportunity to consult letters were sent to the Quechan and Campo Band of Mission Indians Tribes on October 02, 2024, and no comments have been received to date from either.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code, Section 21080.3.2). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code, Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code, Section 21082.3 (c) contains provisions specific to confidentiality.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources	☐	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Energy
☐	Geology /Soils	☐	Greenhouse Gas Emissions	☐	Hazards & Hazardous Materials
☐	Hydrology / Water Quality	☐	Land Use / Planning	☐	Mineral Resources
☐	Noise	☐	Population / Housing	☐	Public Services
☐	Recreation	☐	Transportation	☐	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	☐	Mandatory Findings of Significance

ENVIRONMENTAL EVALUATION COMMITTEE (EEC) DETERMINATION

After Review of the Initial Study, the Environmental Evaluation Committee has:

☐ Found that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ Found that although the proposed project could have a significant effect on the environment, there will not be a significant effect 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.

☐ Found that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ Found that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" 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.

☐ Found 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.

EEC VOTES	YES	NO	ABSENT
PUBLIC WORKS	☒	☐	☐
ENVIRONMENTAL HEALTH SVCS	☒	☐	☐
OFFICE EMERGENCY SERVICES	☒	☐	☐
APCD	☒	☐	☐
AG	☒	☐	☐
SHERIFF DEPARTMENT	☒	☐	☐
ICPDS	☒	☐	☐

For Jim Minnick, Director of Planning/EEC Chairman

Date: 4-24-2025

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PROJECT SUMMARY

A. **Project Location**: 3555 Old Highway 111, Imperial, CA 92251

B. **Project Summary**: The applicant submitted a CUP application for a N2H4 (Hydrazine) processing facility, with Initial Study #24-0034. The facility will include storage metal containers with appropriate cabinets and containers for raw chemical materials and waste, detached from the main building and constructed to store chemicals safely. The proposed building will be a total of 7,000 sq. ft. This building will be a warehouse facility with an office, parking, and site improvements. The building will have a driveway access from Old Highway 111. This project will be located at property identified under Assessor's Parcel Number (APN) 040-250-024-000, within the Mesquite Lake Specific Plan area. A total of 4 to 12 employees will be working in the warehouse/office, with daily operating hours estimated to be from 7:00 am to 5:00 pm approximately.

C. **Environmental Setting**: The project parcel is approximately 9.59 acres and is located on an empty lot on the western side of the Old Highway 111, at about 200 ft away from the State Highway SR-111. It is bordered by ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay) Zones on North and East and ML-I-3-RE (Mesquite Lake Heavy Industrial with Renewable Energy Overlay) on South and West sides of the proposed project.

D. **Analysis**: The proposed project area is located within the County's General Plan designation of "Specific Plan Area" and is currently zoned ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay) and would be considered consistent with the Imperial County's General Plan, "the Mesquite Lake Specific Plan Area" under III. Development Regulations and Infrastructure; A. Land Use Plan, 2. MLI-2 (Mesquite Lake Medium Industrial), b. Uses Permitted with a Conditional Use Permit Only, under, (2) Manufacturing and Assembly, (a) Minimum Impact Heavy Manufacturing.

E. **General Plan Consistency**: The project is located within the County's General Plan designation of "Specific Plan Area" and within the Mesquite Lake Specific Plan Area. The Project could be considered consistent with the General Plan and the County Land Use Ordinance upon the approval of the proposed Conditional Use Permit (CUP).

Exhibit "A"
Vicinity Map

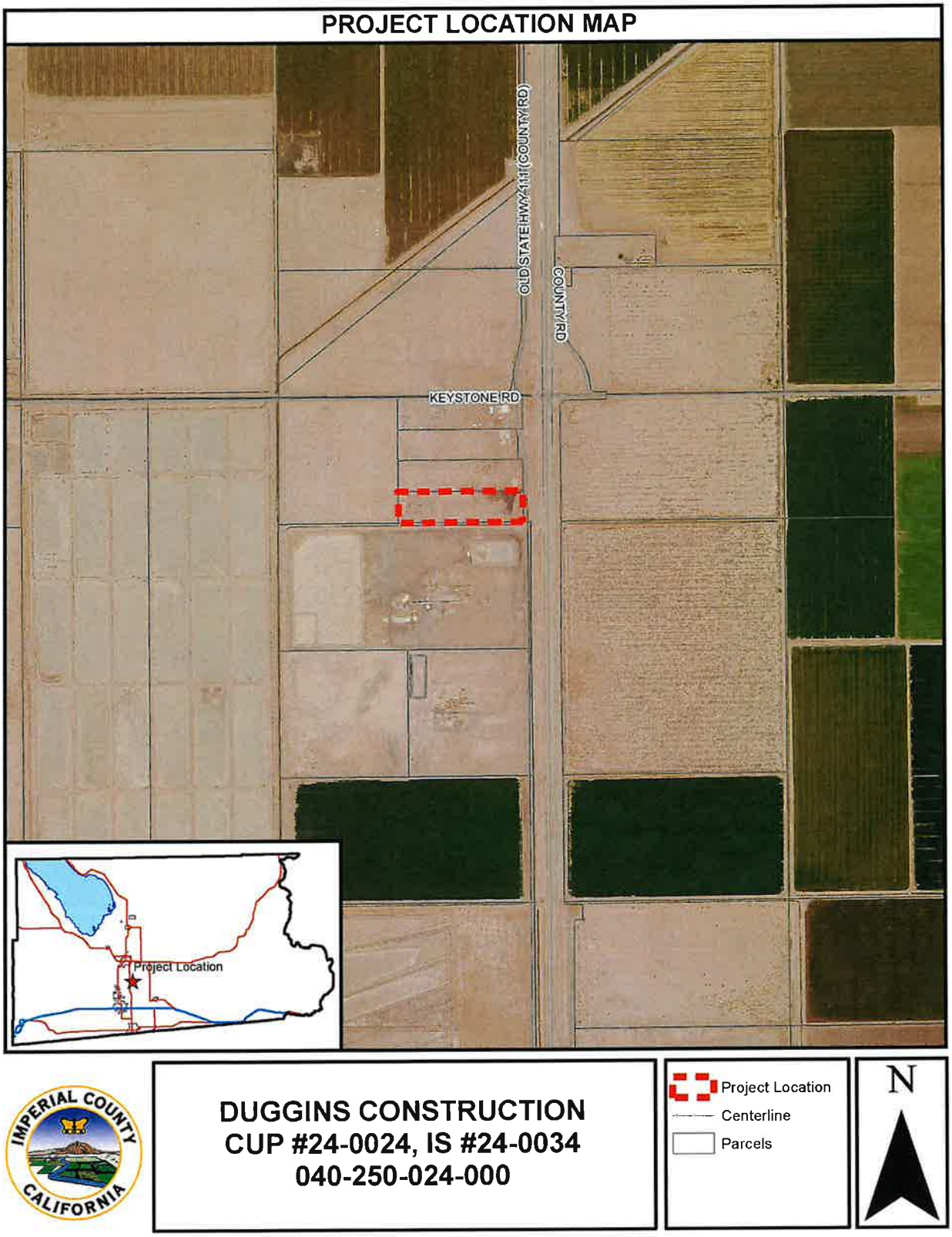

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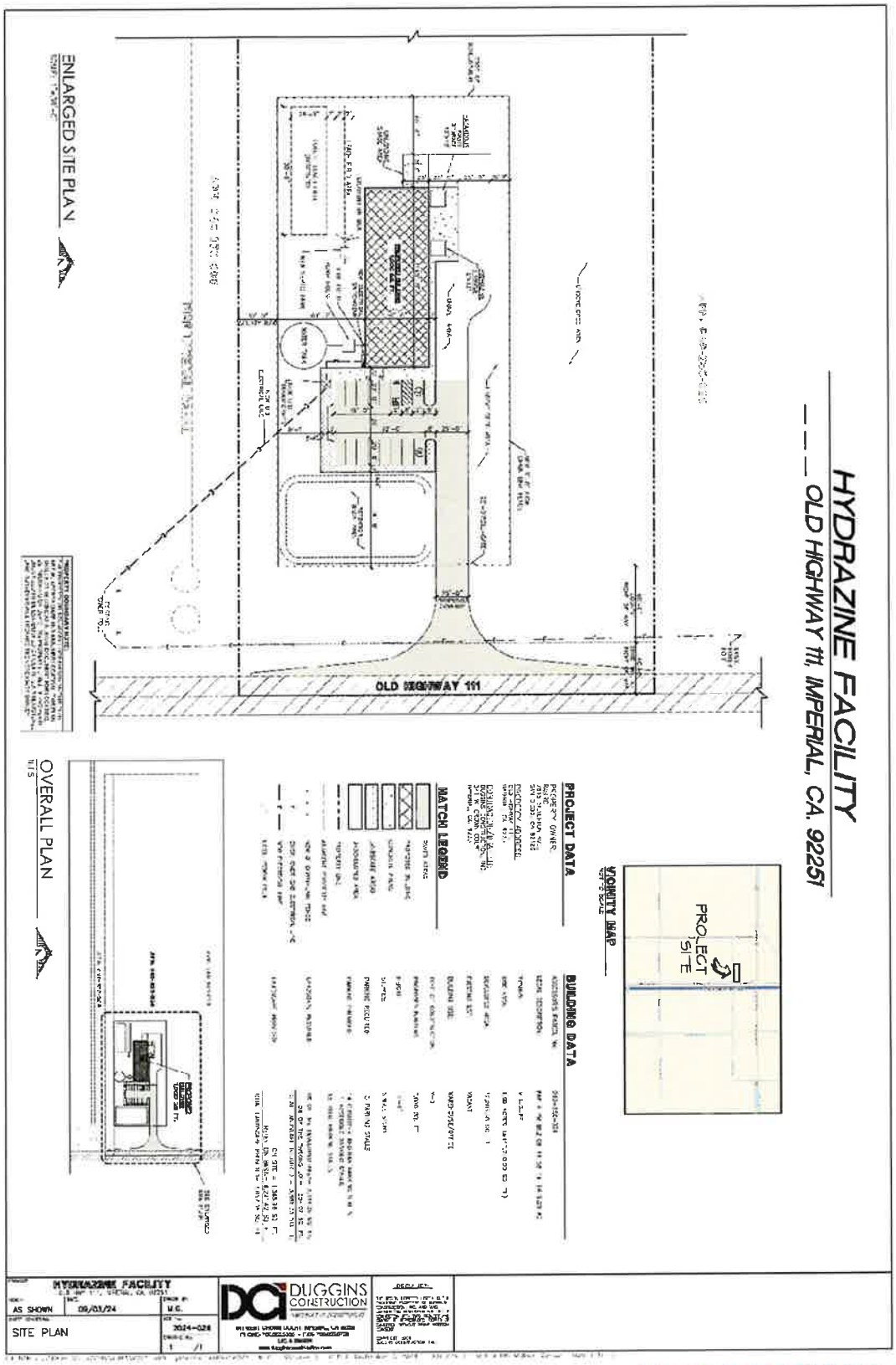
Exhibit "B"
Site Plan/Tract Map/etc.



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EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSWMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

I. *AESTHETICS*

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista or scenic highway? ☐ ☐ ☐ ☒

a) No recognized scenic vistas or officially designated State scenic highways are located near or are visible from the project area. The proposed project is located on the western side of the Old Highway 111, at about 200 ft away from the State Highway SR-111, which travels along the northeast shore of the Salton Sea and is eligible for future Scenic Highway Designation from Bombay Beach to the Northern County Line. This eligible section for a future Scenic Highway Designation of the State Highway SR-111 is located at about 33 miles from the proposed project site. Due to this significant distance, there is no substantial adverse effects on the potential scenic highway portion of the State Highway SR-111. Therefore, no impact is expected.

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? ☐ ☐ ☐ ☒

b) The proposed project is located on an empty lot on the western side of the Old Highway 111, at about 200 ft away from the State Highway SR-111, which travels along the northeast shore of the Salton Sea and is eligible for future Scenic Highway Designation from Bombay Beach to the Northern County Line. This eligible section for a future Scenic Highway Designation of the State Highway SR-111 is located about 33 miles from the proposed project site. Additionally, the Salton Sea is more than 16 miles northwest of the site and the Chocolate Mountains are about 25 miles northeast from the project site. As mentioned above in I. (a), due to this significant distance and the absence of scenic resources (i.e., rock outcroppings, trees, or historic buildings), there are no substantial adverse effects on the potential scenic highway portion of the State Highway SR-111. Therefore, no impact is expected.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surrounding? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? ☐ ☐ ☒ ☐

c) The proposed project location belongs to the Mesquite Lake Specific Plan, and it's zoned as ML-I-2-RE (Mesquite Lake Medium Industrial with a Renewable Energy Overlay) as identified by the Mesquite Lake Specific Plan Map 14-A. The property to the north is also zoned as ML-I-2-RE (Mesquite Lake Medium Industrial with a Renewable Energy Overlay) and currently holds the operation of a photovoltaic energy generation project. The property towards East, across Highway 111, is zoned as ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay) and it is currently vacant land. Both properties towards West and South of the subject parcel are zoned as ML-I-3-RE (Mesquite Lake Heavy Industrial with a Renewable Energy Overlay), while the property towards West remains vacant, the property towards South holds the infrastructure of a biomass fuel power plant. The land on which the proposed project would be located is primary flat, vacant and undeveloped land located in an area zoned for industrial development. Additionally, the project will be subject to development standards related to the visual environment of the area, set forth in Chapter IV of the Mesquite Lake Specific Plan, these standards regulate visual elements such as landscaping, building design, signs, parking, fences, building heights, setbacks and lot area. The proposed project would change the visual character of the area from a vacant abandoned parcel to a 7,000 ft² chemical processing plant with a height of 19'-6". The existing visual quality of the area is low with no scenic vistas. The proposed project would enhance the aesthetic character of the region by developing a project consistent with the industrial type of uses envisioned for the area. Based on the information mentioned before, there won't be a substantial degrade on the existing visual character or quality of the site and its surroundings. Therefore, less than significant impacts are expected.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ☐ ☐ ☒ ☐

d) The **proposed project appears to not have substantial light or glare which would adversely affect day or nighttime views in the area. The project will meet all landscaping standards, which will help offset the light and/or glare, as required on Section IV (B) Site and Design Standards from the Mesquite Lake Specific Plan. Additionally, all exterior lighting shall be shielded and directed away from adjacent properties and away from or shielded from public roads, as per Division 3, 90301.02 Development standards (Commercial & Industrial Zones) (K). Also, the project will be subject to a Design Review submitted to the Planning and Development Services Department, Therefore, less than significant impacts are expected.**

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

II. *AGRICULTURE AND FOREST RESOURCES*

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. --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? ☐ ☐ ☐ ☒

a) The proposed project location is zone ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay) as identified by the Mesquite Lake Specific Plan, pursuant to Imperial County Zone Map #14-A (Title9, §92514.03), and is not farmland, therefore, it would not be converting farmland to a non-agricultural use. No impacts are anticipated.

b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract? ☐ ☐ ☐ ☒

b) The proposed project location is zone ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay) as identified by the Mesquite Lake Specific Plan, pursuant to Imperial County Zone Map #14-A (Title9, §92514.03). The proposed project location is not zoned for agricultural uses; therefore, it would not conflict with existing agricultural zoning or a Williamson Act contract. No impacts are anticipated.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? ☐ ☐ ☐ ☒

c) The proposed project location is zoned ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay) as identified by the Mesquite Lake Specific Plan, pursuant to Imperial County Zone Map #14-A (Title9, §92514.03) and would not conflict with existing forest land or cause re-zoning of existing forest land. No impacts are anticipated.

d) Result in the loss of forest land or conversion of forest land to non-forest use? ☐ ☐ ☐ ☒

d) The **proposed project location is zoned ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay) as identified by the Mesquite Lake Specific Plan, pursuant to Imperial County Zone Map #14-A (Title9, §92514.03). The proposed project site would not result in the loss of forest land or conversion of forest land to non-forest use. No impacts are anticipated.**

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? ☐ ☐ ☐ ☒

e) The construction and operation of the Hydrazine processing facility would not cause changes to the existing environment resulting conversion of farmland to non-agricultural use or conversion of forest to non-forest use. Therefore, no Prime Farmland, Unique Farmland, Farmland of Statewide or local importance agricultural operations will be converted to non-agricultural or non-forest use. No impacts are anticipated.

III. *AIR QUALITY*

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to the following determinations. Would the Project:

a) Conflict with or obstruct implementation of the applicable air quality plan? ☐ ☒ ☐ ☐

a) The proposed project will implement equipment that consist in a closed loop process entirely within a ventilated environment connected to Control Equipment using Best Available Control Technology ("BACT") including high velocity exhaust system and carbon bed abatement. The Control Equipment is manufactured by CS Clean Solutions and is currently in use at a similar processing facility in Longmont, Colorado. The predominant emission from the equipment is nitrogen gas with small amounts of water vapor; however, as trace levels of hydrocarbons may also be present, Control Equipment using

activated carbon will be used to abate these contaminants. Processing rooms, walk-in fume hoods, and process glove boxes will be constantly vented to facility Control Equipment systems. Any equipment or emission unit that has the potential for hydrazine release will have detection monitors with Supervisory Control and Data Acquisition ("SCADA") connectivity to initiate the process shut down sequence and activate the area alarm system.

The proposed project will be required to adhere to the requirements of the Air Pollution Control District (APCD) and comply with APCD's rules and regulations. The Air Pollution Control District requests in their comment letter dated October 15, 2024[7], an Air District Permit and an application for engineering review of the project, along with the design specifications and an HRA (Health Risk Assessment) as Hydrazine is identified by the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) as a Hazardous Air Pollutant and Air Toxic Pollutant. Additionally, the project and any future construction must comply with all Air District rules and regulations with emphasis on Regulation VIII-Fugitive Dust Rules. Furthermore, it is expected that a less than significant impact would occur with the implementation of mitigation measure AQ-1.

MM AQ-1: The applicant must provide a Health Risk Assessment (HRA) referencing the current CEQA Air Quality Handbook for Imperial County. An Air District Permit and an application for engineering review of the project will need to be submitted along with the design specifications and the HRA for review by the Air Pollution Control District. Any relative humane exposure, location of the project, distance to sensitive receptors should be considered when developing the risk assessment.

b) 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? ☐ ☒ ☐ ☐

b) It is expected that adherence to the requirements mentioned above in section III a) would prevent the project from resulting 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 during operation or construction of the proposed Hydrazine processing facility. Any impacts are considered to be less than significant with the implementation of mitigation measure AQ-1.

c) Expose sensitive receptors to substantial pollutants concentrations? ☐ ☒ ☐ ☐

c) All hazardous chemicals and waste will be properly identified, stored, and controlled to requirements set forth by OSHA, GHS, Fire Code, NFPA, and any other applicable standards. Hazardous waste will be collected and properly disposed of by a licensed third-party service provider. All facility-generated hazardous waste will be accumulated in an external storage building in accordance with Title 22 from the California Code of Regulations (CCR), Division 4.5, Chapter 12, Section 66262.16 "Small Quantity Generator". Adherence to these standards and the implementation of the Control Equipment mentioned above in section III a) along with the mitigation measure AQ-1, would prevent the exposure of sensitive receptors to substantial pollutants concentrations, therefore a less than significant impact would be expected, considering the implementation of mitigation measure AQ-1.

d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people? ☐ ☒ ☐ ☐

d) As mentioned in section III a), the project proposes a closed loop process, entirely within a ventilated environment connected to a Control Equipment using Best Available Control Technology ("BACT") including high velocity exhaust systems and carbon bed abatement. The Control Equipment is manufactured by CS Clean Solutions and is currently in use at a similar processing facility in Longmont Colorado. The predominant emission from the equipment is nitrogen gas with small amounts of water vapor; however, as trace levels of hydrocarbons may also be present, Control Equipment using activated carbon will be used to abate these contaminants. Processing rooms, walk-in fume hoods, and process glove boxes will be constantly vented to facility Control Equipment systems. Any equipment or emission unit that has the potential for hydrazine release will have detection monitors with Supervisory Control and Data Acquisition ("SCADA") connectivity to initiate the process shut down sequence and activate the area alarm system. Adherence to the requirements mentioned in section II a) and the compliance with the Air Pollution Control District rules and regulations, along with the implementation of mitigation measure AQ-1, will mitigate the emissions leading to odors adversely affecting a substantial number of people, leading to a less than significant impact.

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

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 Wildlife or U.S. Fish and Wildlife Service? ☐ ☒ ☐ ☐

a) Although the California Department of Fish and Wildlife Lands Viewer[9] identifies a distribution model and predicted habitat for the Burrowing Owl within the proposed project area and its surroundings, the proposed project does not expect to cause any physical changes to the environment due to its established land designation as Industrial within the Mesquite Lake Specific Plan and the existing development surrounding the property, including a solar farm and a power plant. However, the Mesquite Lake Specific Plan includes established mitigation measures in its Master Environmental Impact Report[38] to address potential impacts to Burrowing Owls, which will be strictly followed. Considering the current land conditions and the implementation of mitigation measure BIO-1, the project is anticipated to result in a less than significant impact with mitigation incorporated.

MM BIO-1: Prior to grading or construction, an initial survey to determine the presence of burrowing owls shall be conducted between February and September by a biologist that has been determined by the USFWS as qualified to conduct burrowing owl surveys. The survey shall be conducted in accordance with the latest USFWS-approved guidelines. A report on the results of the survey and recommended avoidance or mitigation measures shall be provided by the applicant to the USFWS, CDFW, and Imperial County Planning and Development Services Department. No clearing or ground-disturbing activities may be taken until the report and recommendations have been accepted by the USFWS, CDFG, and Imperial County Planning and Development Services Department. All burrowing owls found on the project site shall be tagged by USFWS-qualified burrowing owl biologist.

If burrowing owl burrows are found present within construction areas and a 50-meter (165-foot) boundary of construction limits, avoidance is the preferred level of mitigation. If avoidance cannot be met, or no burrowing owls were detected during the first survey, a second survey shall be conducted no less than 30 days prior to any clearing, ground disturbance, or demolition of existing structures. If no burrowing owls are present, a third survey shall be conducted no less than five days prior to the commencement of construction and, if no burrowing owls are present, clearing, grading, demolition, or construction may commence. If burrowing owls were present at the time of the second survey and CDFW and USFWS Office of Law Enforcement concur, on-site passive relocation can be implemented. The project biologist shall evaluate the suitability of nearby habitat, the availability of an existing or constructed alternate burrow for each burrow excavated, and the opportunity for preservation of the site, such as through a conservation easement that would be managed to promote burrowing owl use of the site. Relocation requires that owls should be excluded flow burrows in the immediate impact zone and 50-meter buffer zone by installing one-way doors in burrow entrances, left in place for 48 hours before excavation. Relocation of owls should only be implemented during the nonbreeding season.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? ☐ ☐ ☒ ☐

b) As outlined in earlier sections of this document, the proposed project is situated within the boundaries of the Mesquite Lake Specific Plan. The subject parcel is zoned as ML-I-2-RE, which stands for *Mesquite Lake Medium Industrial with Renewable Energy Overlay*. This zoning designation is specifically intended to accommodate medium industrial uses while promoting the integration of renewable energy projects, in line with the broader development goals of the Mesquite Lake area.

The current physical conditions of the subject parcel are characterized by an undeveloped portion of land, with the entire area consisting of compacted dirt. No water bodies, riparian habitats, or other environmentally sensitive natural communities are present within the boundaries of the parcel that would require special consideration or mitigation measures.

In conclusion, the existing conditions of the parcel and its zoning compatibility with industrial uses support the determination that the proposed project will lead to a less than significant impact.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? ☐ ☐ ☒ ☐

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

c) The proposed project location is zoned ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay) ; in accordance to the Mesquite Lake Specific Plan, the physical conditions of Mesquite Lake's former natural environment results in the potential presence of biological resources associated with wetlands along the drainage swales and natural depressions in portions of the site. While these areas are highly altered by agricultural operations and degraded by off-road vehicle activity, potential wetland areas may, nonetheless, be regulated by State and federal agencies. Additionally, based on the Conservation & Open Space Element from the Imperial County General Plan, Figure 1, the project site does not appear to be in a USFWS National Wetland Inventory identified area. The applicant must adhere to any applicable state and/or federal requirements for this project; consequently, a less than significant impact is expected.

d) Interfere substantially with the movement of any 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? ☐ ☐ ☒ ☐

d) The proposed project is located on an empty parcel surrounded by development on adjacent parcels towards North and South, amongst which we find a ground installed solar field towards north and a power plant towards south. Active traffic is also occurring on the eastern side of the property from both the Old Highway 111 and the State Highway 111. Therefore, it is not anticipated that the project would substantially interfere with the movement of any resident or migratory fish or wildlife corridors or impede the use of native wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. Any impact would be considered less than significant.

e) Conflict with any local policies or ordinance protecting biological resource, such as a tree preservation policy or ordinance? ☐ ☐ ☒ ☐

e) As previously stated in this section the proposed project is located on an empty parcel consisting of compacted dirt, surrounded by development towards North and South. It is not expected that the project will conflict with any local policies or ordinance protecting biological resources, such as a tree preservation policy or ordinance. Any impact would be considered less than significant.

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? ☐ ☐ ☒ ☐

f) As previously stated in this section the proposed project is located on an empty parcel consisting of compacted dirt, surrounded by development towards North and South. It is not expected that the project will conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Any impact would be considered less than significant.

V. *CULTURAL RESOURCES Would the project:*

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? ☐ ☐ ☒ ☐

a) The project site is located in an area identified by the Imperial County General Plan as part of the Mesquite Lake Specific Plan and zoned as ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay). The proposed project area is an empty lot surrounded by parcels with existing development and disturbance on the land. Additionally, consultation to the Quechan Tribe and the Campo Band was performed pursuant to AB52 and no response or concern was received from the consulted parties, therefore, a less than significant impact is expected on historical resources.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? ☐ ☐ ☒ ☐

b) The project site is located in an area identified by the Imperial County General Plan as part of the Mesquite Lake Specific Plan and zoned as ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay). The proposed project area is an empty lot surrounded by parcels with existing development and disturbance on the land. Additionally, according to Mesquite Lake Specific Plan, Chapter II, Section D "Environmental Resources", Item 2 "Cultural Resources"[37], no substantial archaeological deposits are expected in the Mesquite Lake area due to the absence of historical records of permanent Kamia villages in the area, therefore, a less than significant impact is expected on archeological resources.

c) Disturb any human remains, including those interred outside of dedicated cemeteries? ☐ ☐ ☒ ☐

c) As previously mentioned in items (V)(a) and (V)(b) above, the project site is located in an area identified by the Imperial County General Plan as part of the Mesquite Lake Specific Plan and zoned as ML-I-2-RE (Mesquite Lake Medium Industrial

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

with Renewable Energy Overlay). The proposed project area is an empty lot surrounded by parcels with existing development and disturbance on the land. Additionally, according to Mesquite Lake Specific Plan, Chapter II, Section D "Environmental Resources", Item 2 "Cultural Resources", no substantial archaeological deposits are expected in the Mesquite Lake area due to the absence of historical records of permanent Kamia villages in the area, therefore, the project would not disturb any human remains, including those interred outside of dedicated cemeteries. Any impacts are expected to be less than significant.

VI. ***ENERGY Would the project:***

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? ☐ ☐ ☒ ☐

a) The proposed project is for a 7,000 sq. ft. N2H4 (Hydrazine) processing facility, with a warehouse and office space. Operations will be conducted during normal business hours from 7 am to 5 pm daily by employees trained and proficient in facilities and safety management, production operations, and process control. The facility will be in a secure environment with a badge access-controlled building inside a fenced enclosure with gated entry, which does not include nor contemplate the wasteful, inefficient, or unnecessary consumption of energy resources. Additionally, per comment letter received from the Imperial Irrigation District (IID) dated October 3rd, 2024[14], electrical capacity is limited in the project area and a circuit study may be required. Any system improvements or mitigation identified in the circuit study to enable the provision of electrical service to the project shall be the financial responsibility of the applicant. Also, if and when the project needs electrical service, the applicant should be advised to contact IID. Adherence to IID's standards, regulations, and recommendations would bring any impacts to less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? ☐ ☐ ☒ ☐

b) As mentioned above on (VI)(a) the proposed project is for a new 7,000 sq. ft. N2H4 (Hydrazine) processing facility, with a warehouse and office space. The new construction must adhere to the 2022 Energy Code which encourages efficient electric systems for new buildings. On a separate note, there's existing development on the north and south portion of the proposed site that falls under the permitted uses under the Mesquite Lake SPA for parcels designated as Industrial; therefore, the proposed project would not obstruct a state or local plan for renewable energy or energy efficiency. Additionally, as previously mentioned on item (VI)(a), the applicant would adhere and comply with IID's standards, regulations, and recommendations. Any impacts are expected to be less than significant.

VII. ***GEOLOGY AND SOILS Would the project:***

a) Directly or indirectly cause potential substantial adverse effects, including risk of loss, injury, or death involving: ☐ ☐ ☒ ☐

a) The proposed development does not conflict with the geology and soil of on-site or adjacent properties, and it does not expose people or structures to potential adverse effects, including risk of loss injury or death. Therefore, a less than significant impact is expected.

1) 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? Refer to Division of Mines and Geology Special Publication 42? ☐ ☐ ☒ ☐

1) A review of the current Alquist-Priolo Earthquake Fault Zone maps (CGS, 2000a)[15] indicates that the nearest mapped Earthquake Fault is the Brawley Seismic Zone Fault +/-1.5 miles towards East and the Imperial Fault towards +/-1.5 miles towards West from the project location, therefore, it is not expected to directly or indirectly cause potential substantial adverse effects, including risk of loss, injury or death involving the rupture of a known earthquake fault. Impacts are expected to be less than significant.

2) Strong Seismic ground shaking? ☐ ☐ ☒ ☐

2) Ground shaking is expected as the project is located in the seismically active Imperial Valley with numerous mapped faults of San Andreas Fault System traversing the region. The project site is an empty parcel surrounded by existing development towards north and south, amongst which we find a ground installed solar field towards north and a power plant towards south which have existing structures that have been in place for many years. The structures composing the proposed Hydrazine processing facility will be required to comply with the current California Building Codes at the time of permitting and construction. Therefore, any impacts are anticipated to be less than significant.

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

3) Seismic-related ground failure, including liquefaction and seiche/tsunami? ☐ ☐ ☒ ☐

3) The proposed Hydrazine processing facility will be located within the boundaries of an empty lot, surrounded by existing development towards north and south, amongst which we find a ground installed solar field towards north and a power plant towards south. Due to the development that has been present in the neighboring parcels for several years, it does not appear that the project is on a geologic unit or soil that is unstable or that would become unstable as a result of seismic activities, including liquefaction or seiche/tsunami. Less than significant impacts are expected.

4) Landslides? ☐ ☐ ☐ ☒

4) According to the Imperial County General Plan Landslides Activity Map, Figure 2[22], Seismic and Public Safety Element, the project site does not lie within a landslide activity area and therefore, no impacts are anticipated.

b) Result in substantial soil erosion or the loss of topsoil? ☐ ☐ ☒ ☐

b) As stated above in VII-a3, the proposed project location is an empty parcel consisting of compacted dirt that neighbors developed parcels, which have structures within that have been in place for several years. Therefore, it is not anticipated that the project would result in substantial soil erosion or the loss of topsoil. Any impact would be considered less than significant.

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 landslides, lateral spreading, subsidence, liquefaction or collapse? ☐ ☐ ☒ ☐

c) As stated in VII-a3, the proposed project location is an empty parcel consisting of compacted dirt that neighbors developed parcel, which have structures within that have been in place for several years and does not appear to be located on a geologic unit or soil that is unstable as a result of the project and would not potentially result in on-or off-site landslides, lateral spreading, substance, liquefaction or collapse. Additionally, as stated in VII-a4, the project is not located in an area that is subject to landslides. Therefore, any impact would be considered less than significant.

d) Be located on expansive soil, as defined in the latest Uniform Building Code, creating substantial direct or indirect risk to life or property? ☐ ☐ ☒ ☐

d) As stated before in this section the proposed project location is an empty parcel consisting of compacted dirt with neighboring parcels that have had existing structures on them for several years. Any new development on the project location will be required to conform to the latest California Building Code. Therefore, it is not expected that the project would be located on expansive soil which would create a substantial direct or indirect risk to life or property and any impacts would be considered less than significant.

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? ☐ ☐ ☒ ☐

e) The proposed project parcel is situated near to properties to the north, within less than 600 feet, which currently rely on septic systems for wastewater management. In line with the development plans, a septic system is also being proposed for this property, designed to meet or exceed the standards outlined in the California Building Code as well as the specific requirements set forth by the Imperial County Environmental Health Services (EHS). Based on this information, it is anticipated that the possibility of an impact due to the inability of the soil to support the use of septic tanks or alternative wastewater disposal systems will be less than significant.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ☐ ☐ ☒ ☐

f) The proposed Hydrazine processing facility will be located within the boundaries of an empty parcel consisting of compacted dirt. The project will be located on a +/- 9.59 Acres area that neighbors existing development including a power plant and a ground installed solar field. The project will have concrete foundations poured to the ground and will be designed and built up to the California Building Code. The existence of development on neighboring parcels indicates that the possibility of an impact on unique paleontological resources and or unique geologic feature would be less than significant.

VIII. ***GREENHOUSE GAS EMISSION*** ***Would the project:***

a) Generate greenhouse gas emissions, either directly or ☐ ☐ ☒ ☐

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

indirectly, that may have a significant impact on the environment?

a) The proposed RASIRC Hydrazine Processing Facility will conduct normal business hours between 7 am and 5 pm with most employees working a typical 8-hour day. Initially, the number of employees on site will be 5 and the most employees expected to be working in the future will be 12. RASIRC products are sold to Semiconductor manufacturers and are usually sold through distributors or directly through a RASIRC office in San Diego. Customers will not visit the site for purposes of sales or inquiry. There will be no customer traffic at this location. Vehicle traffic would consist of weekday commuting of employees and infrequent shipments and deliveries of goods. During the start-up phase, traffic will potentially be greater as the equipment for the plant operation will be delivered, qualified and placed into service. There will also be visits from the San Diego facility to ensure facility startup and operational readiness. It is expected that the number of vehicles on site would be proportional to the number of employees. RASIRC does not have any fleet vehicles or machinery other than a forklift for shipping and receiving purposes. Based on this information, impacts are expected to be less than significant.

b) Conflict with an applicable plan or policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? ☐ ☐ ☒ ☐

b) The proposed RASIRC Hydrazine Processing Facility is not expected to conflict with an applicable plan or policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The proposed project will be required to adhere to the requirements of the Air Pollution Control District (APCD) and comply with APCD's rules and regulations. Any impacts are expected to be less than significant.

IX. *HAZARDS AND HAZARDOUS MATERIALS Would the project:*

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ☐ ☐ ☒ ☐

a) All hazardous chemicals and waste will be properly identified, stored, and controlled to requirements set forth by OSHA, GHS, Fire Code, NFPA, and any other applicable standards. Hazardous waste will be collected and properly disposed of by a licensed third-party service provider. All facility-generated hazardous waste will be accumulated in an external storage building in accordance with Title 22 from the California Code of Regulations (CCR), Division 4.5, Chapter 12, Section 66262.16 "Small Quantity Generator". Adherence to these standards and the implementation of the Control Equipment mentioned above in section III a), along with the mitigation measure AQ-1, would prevent the creation of a significant hazard to the public or the environment, therefore a less than significant impact would be expected.

b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment? ☐ ☐ ☒ ☐

b) As mentioned above in section IX a), hazardous waste will be collected and properly disposed of by a licensed third-party service provider. All facility-generated hazardous waste will be accumulated in an external storage building in accordance with Title 22 from the California Code of Regulations (CCR), Division 4.5, Chapter 12, Section 66262.16 "Small Quantity Generator". The proposed project will implement equipment that consist in a closed loop process entirely within a ventilated environment connected to Control Equipment using Best Available Control Technology ("BACT") including high velocity exhaust system and carbon bed abatement. The Control Equipment is manufactured by CS Clean Solutions and is currently in use at a similar processing facility in Longmont, Colorado. The predominant emission from the equipment is nitrogen gas with small amounts of water vapor; however, as trace levels of hydrocarbons may also be present, Control Equipment using activated carbon will be used to abate these contaminants. Processing rooms, walk-in fume hoods, and process glove boxes will be constantly vented to facility Control Equipment systems. Any equipment or emission unit that has the potential for hydrazine release will have detection monitors with Supervisory Control and Data Acquisition ("SCADA") connectivity to initiate the process shut down sequence and activate the area alarm system. Adherence to these standards and procedures would prevent the creation of any significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment, therefore a less than significant impact would be expected.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? ☐ ☐ ☐ ☒

c) The proposed project is not located near any schools. The closest school is Miguel Hidalgo Elementary School, located in the City of Brawley, approximately 4.5 Miles North of the proposed project site. Therefore, no impact would be expected.

		Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
d)	Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

d) The proposed project site is not listed as a hazardous materials site pursuant to Government Code, Section 65962.5. The proposed project site is currently an empty parcel consisting of compacted dirt, there are no hazardous materials on-site. Therefore, no impact would be expected.

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 or excessive noise for people residing or working in the project area?	☐	☐	☐	☒

e) The proposed project is not located within any airport zone in the Airport Land Use Compatibility Plan. Therefore, the project is not expected to create an aircraft hazard for people in the proposed project area. The closest airport is Brawley municipal airport approximately 5.5 miles North of the proposed project site. Therefore, no impact would be expected.

f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

f) The proposed project is located within the Mesquite Lake Specific Plan with access from the Old State Highway 111 and is not expected to impair implementation of or physically interfere with an adopted emergency plan or emergency evacuation plan. Less than significant impacts are expected.

g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

g) The proposed project is not expected to expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires as the project is not located in an area prone to or susceptible to wildland fires. Therefore, impacts are considered less than significant.

X. *HYDROLOGY AND WATER QUALITY* *Would the project:*

a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐

a) The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Additionally, as per the comment letter received from the Imperial Irrigation District (IID) dated October 3rd, 2024[14], to properly assess the impacts to IID water facilities, the applicant should submit project plans, including grading & drainage and fencing plans, to IID Water Department Engineering Services for review and comment prior to final project design approval. Therefore, a less than significant impact is expected.

b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐

b) The project proposes using water supplied by the IID to an onsite water tank located near the 7,000 sq. ft. facility. No decrease on groundwater supplies or interference with groundwater recharge that would impede sustainable groundwater management is anticipated. Nonetheless, per the comment letter received from the Imperial Irrigation District (IID) dated October 3rd, 2024[14], to properly assess the impacts to IID water facilities, the applicant should submit project plans, including grading & drainage and fencing plans, to IID Water Department Engineering Services for review and comment prior to final project design approval. Therefore, by following these requirements, a less than significant impact is expected.

c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐

c) The proposed Hydrazine processing facility will be located within the Mesquite Lake Specific Plan in an Industrial designated parcel, surrounded by existing development including a solar farm towards North and an energy plant towards

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

South. The proposed facilities will be located on the eastern portion of a +/- 9.59 Acres parcel that is currently compacted dirt but will be covered in concrete foundations where the 7,000 sq. ft. facilities will be located, the construction of such development will require a building permit. The applicant should submit project plans, including grading & drainage and fencing plans, to the IID Water Department Engineering Services for review and comment prior to final project design approval. The reviewal of such project plans will prevent any adverse effect, therefore, it is not expected that the project would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces. Any impact would be considered less than significant.

(i) result in substantial erosion or siltation on- or off-site; ☐ ☐ ☒ ☐

i) The proposed Hydrazine processing facility will be located within the boundaries of the Mesquite Lake Specific Plan in Industrial designated parcel surrounded by existing development. The project is not anticipated to result in substantial erosion or siltation on- or off-site. Any impact would be considered less than significant

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; ☐ ☐ ☒ ☐

ii) The proposed Hydrazine processing facility will be located within the boundaries of the Mesquite Lake Specific Plan in Industrial designated parcel surrounded by existing development. A retention basin will be incorporated on the eastern side of the property. Building and grading permits will be required for the development of the project to assess and prevent any potential impacts. Therefore, the project is not anticipated to result in substantial increase of the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Any impact would be considered less than significant.

(iii) 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; or; ☐ ☐ ☒ ☐

iii) It is not expected or anticipated that the proposed Hydrazine processing facility would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage system or provide substantial sources of polluted runoff. Additionally, a retention basin will be part of the development as shown in the proposed site plan. Any impact would be considered less than significant.

(iv) impede or redirect flood flows? ☐ ☐ ☒ ☐

iv) The proposed Hydrazine processing facility will require a building permit application and grading plans that will be reviewed to assess and prevent any potential impact. As stated before, a retention basin will be part of the proposed development as shown in the proposed site plan. Any impact would be considered less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? ☐ ☐ ☒ ☐

d) The proposed Hydrazine processing facility is not located in a flood hazard, tsunami, or seiche zones and therefore, is not expected to risk release of pollutants due to project inundation. Any impact would be considered less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? ☐ ☐ ☒ ☐

e) The proposed Hydrazine processing facility is not anticipated to conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan. Any impact would be considered less than significant.

XI. ***LAND USE AND PLANNING Would the project:***

a) Physically divide an established community? ☐ ☐ ☐ ☒

a) The project site is located in an area identified by the Imperial County General Plan as part of the Mesquite Lake Specific Plan which proposes development primarily with light, medium, and heavy industrial uses, and the site for the propose

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project is zoned as ML-I-2-RE (Mesquite Lake Medium Industrial with Renewable Energy Overlay) currently surrounded by Industrial and Agricultural zones and it will no physically divide established community. No impacts are anticipated.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? ☐ ☐ ☐ ☒

b) As previously mentioned in XI a) The project site is located in an area identified by the Imperial County General Plan as part of the Mesquite Lake Specific Plan; The project is consistent with the County's General Plan Land Use Element and the Land Use Ordinance with the approval of a Conditional Use Permit. The proposed project does not conflict with any applicable land use plan, policy and regulation. No impacts are anticipated.

XII. *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? ☐ ☐ ☐ ☒

a) The proposed project site is not located in an area classified to be a regionally important mineral resource per the California Department of Conservation-Mineral Land Classification[36]. Therefore, no impacts are anticipated.

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? ☐ ☐ ☐ ☒

b) Per the Imperial County General Plan, Conservation and Open Space Element, Figure 8: Existing Mineral Resources, the proposed project site is not located within an area known to be classified as a regionally important mineral resources. Therefore, it is not expected that the proposed project would 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. Therefore, no impact is expected.

XIII. *NOISE* *Would the project result in:*

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? ☐ ☐ ☒ ☐

a) Noise associated with the construction of the proposed project will be temporary, short-term, and intermittent in nature. Construction activities and associated noise will be limited to the time frames specified in the Imperial County Noise Element and Land Use Ordinance Division 7: Noise Abatement and Control, which states that construction noises from a single piece of equipment or a combination of equipment not exceed 75 decibels of hourly average noise data, when averaged over an-8 hour period and when measured at the nearest sensitive receptor; therefore, the impact is expected to be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels? ☐ ☐ ☒ ☐

b) No major vibration-including activities, such as pile driving or blasting, will be conducted at the project facility. Some equipment may cause minor noise and vibration; however, no major vibrations or noises are expected, therefore the impact is expected to be less than significant.

c) For a project located within the vicinity of a private airstrip or 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? ☐ ☐ ☐ ☒

c) The proposed project site is not located within the vicinity of a private airstrip or within the Compatibility Map of the Imperial Valley Airport per the Imperial County Airport Land Use Compatibility Plan; therefore, no impact is expected that would expose people in the project area to excessive noise levels.

XIV. *POPULATION AND HOUSING* *Would the project:*

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

a) The proposed project does not include any housing or public infrastructure that may include substantial unplanned population growth in an area either directly or indirectly. Therefore, no impact is expected.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

b) The proposed project will be located within a currently empty lot zoned ML-I-2-RE (Mesquite Lake Medium Industrial with a Renewable Energy Overlay), there will be no displacement of housing. Therefore, no impact is expected.

XV. *PUBLIC SERVICES*

a) 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 governmental 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 public services:	☐	☐	☒	☐

a) The proposed project is not expected to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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 public services. It is expected that compliance with Imperial County Fire Department requirements per letter dated October 24, 2024[35], would lessen any public service impacts to less than significant levels.

1) Fire Protection?	☐	☐	☒	☐

1) The proposed Hydrazine processing facility is not expected to create a substantial adverse impact to fire protection. Impacts are expected to be less than significant. The applicant shall comply with Imperial County Fire Department requirements per letter dated October 24, 2024[35], to lessen any impact to less than significant levels.

2) Police Protection?	☐	☐	☒	☐

2) The proposed Hydrazine processing facility is not expected to create a substantial adverse impact to police protection. Impacts are expected to be less than significant.

3) Schools?	☐	☐	☐	☒

3) The proposed Hydrazine processing facility does not expect an increment in population that would require the construction of new educational facilities; therefore, no impacts are anticipated.

4) Parks?	☐	☐	☐	☒

4) The proposed Hydrazine processing facility would not result in a substantially adverse physical impact to existing parks. No impacts are anticipated.

5) Other Public Facilities?	☐	☐	☒	☐

5) The proposed project is not expected to result in a demand for other public facilities services. As such, implementation of the proposed project would not adversely affect other public facilities or require the construction of new or modified public facilities. Less than significant impacts are anticipated.

XVI. *RECREATION*

a) Would the project increase the use of the existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

a) The proposed project consists of a N2H4 (Hydrazine) processing facility within the Mesquite Lake SPA. The facility will include storage metal containers with appropriate cabinets and containers for raw chemical materials and waste, detached

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

from the main building and constructed to store chemicals safely. The proposed building will be a total of 7,000 sq. ft. This building will be a warehouse facility with an office, parking, and site improvements. The building will have a driveway access from Old Highway 111. Additionally, there are no existing neighborhoods or regional parks within the proposed project area. The project is located on Mesquite Lake Specific Plan Area, which is designated for development primarily with light, medium, and heavy industrial uses; therefore, the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. No impacts are expected.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment? ☐ ☐ ☐ ☒

b) The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment. Also, as previously stated on item (XVI)(a), there are no regional parks within the proposed project area; therefore, no impacts are expected.

XVII. *TRANSPORTATION* *Would the project:*

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? ☐ ☐ ☒ ☐

a) Vehicle traffic would consist of weekday commuting of employees and infrequent shipments and deliveries of goods, approximately 5-10 times a month. During the start-up phase, traffic will potentially be greater as the equipment for the plant operation will be delivered, qualified and placed into service. There will also be visits from a San Diego facility to ensure facility startup and operational readiness. It is expected that the number of vehicles on site will be proportional to the number of employees, which volume is expected to be from 4 to 12 employees. RASIRC does not have any fleet vehicles or machinery other than a forklift for shipping and receiving purposes. Nonetheless, as stated in a received comment letter, submitted by the Imperial County Department of Public Works dated February 24, 2025[28], a trip generation and distribution analysis report shall be prepared by a traffic engineer licensed in the State of California and submitted to the Department of Public Works for review and approval. Existing traffic counts on Old Highway 111 south of Keystone Road and Keystone Road West of Old Highway 111 shall be obtained and included in the analysis report. The analysis report shall include fair share calculations related to the project's traffic impacts within the Mesquite Lake Specific Plan Area. The applicant shall be responsible for the fair share contribution identified on this report. The trip generation and distribution analysis report shall be submitted to this Department prior to issuance of any Building Permit. The fair share contribution shall be paid to the Department of Public Works prior to the issuance of the Certificate of Occupancy. By abiding to these requirements, we can expect a less than significant impact.

b) Would the project conflict or be inconsistent with the CEQA Guidelines section 15064.3, subdivision (b)? ☐ ☐ ☒ ☐

b) The proposed Hydrazine processing facility is located along Old Highway 111 which is designated as a County maintained road, said project would be located approximately 1000 ft south from the intersection between E Keystone Rd and the State Highway 111, which runs from South to North and vice versa, approximately 200 ft east of the proposed project site. As stated before on item XVII-a), the applicant will have to comply with the requirements set forth by the Department of Public Works to address any potential impact. It does not appear that the project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Based on the information mentioned above, any impact would be considered less than significant.

c) Substantially increases hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? ☐ ☐ ☒ ☐

c) The proposed Hydrazine processing facility does not appear to substantially increase hazards due to a geometric design feature or incompatible uses. Any impact would be considered less than significant.

d) Result in inadequate emergency access? ☐ ☐ ☒ ☐

d) The project is not expected to result in inadequate emergency access but will need to comply with any requirements from imperial County Fire Department regarding emergency access, as specified in their provided comment letter dated October 24, 2024[35]. Any impact would be considered less than significant.

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

XVIII. ***TRIBAL CULTURAL RESOURCES***

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place or object with cultural value to a California Native American tribe, and that is: ☐ ☐ ☒ ☐

a) According to the Imperial County General Plan's Conservation and Open Space Element, Figure 6[8], the proposed project site is not located within any known Native American cultural sensitivity area. Additionally, as previously discussed in section (V)(a) above, the Quechan and Campo Band of Mission Indian Tribes have requested to be consulted under Assembly Bill 52. Consultation letters were sent to the Quechan and Campo Band of Mission Indian Tribes on October 02, 2024. On October 03, 2024, the County received a no comments email from the Yuma Quechan Indian Tribe in reference to the proposed project. No comments have been received from the Campo Band of Mission Indians Tribe for this project to this date. Therefore, less than significant impacts are expected.

(i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as define in Public Resources Code Section 5020.1(k), or ☐ ☐ ☒ ☐

(i) According to the California Historic Resources[3] in Imperial County, the proposed project site is not listed or seem to be eligible under the Public Resources Code Section 21074 or 5020.1 (k); therefore, any impacts are expected to be less than significant.

(ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth is subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe. ☐ ☐ ☒ ☐

(ii) No significant resources listed as defined in the Public Resources Code Section 5024.1 are expected to be impacted by the proposed project. Additionally, as previously discussed in item (XVIII)(a) above, AB 52 Consultation letters were sent to the Quechan and Campo Band of Mission Indian Tribes on October 02, 2024. On October 03, 2024, the County received a no comments email from the Quechan Indian Tribe in reference to the proposed project. No comments have been received from the Campo Band of Mission Indians Tribe for this project to this date. Less than significant impacts are expected.

XIX. ***UTILITIES AND SERVICE SYSTEMS*** ***Would the project:***

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects? ☐ ☐ ☒ ☐

a) The project proposes an on-site septic system with future leach field reserved on the western side of the property and a retention basin area on the eastern side. Water would be supplied by the IID to the proposed facility. Additionally, as per the comment letter received from the Imperial Irrigation District (IID) dated October 3rd, 2024[14], to properly assess the impacts to IID water facilities, applicants should submit project plans, including grading & drainage and fencing plans, to IID Water Department Engineering Services for review and comment prior to final project design approval. This same letter states that as electrical capacity is limited in the project area, a circuit study may be required. Any system improvements or mitigation identified in the circuit study to enable the provision of electrical service to the project shall be the financial responsibility of the applicant. The applicant will have to meet the requirements set forth by the IID in the comment letter mentioned before and follow the established procedures to obtain services to the project location. The project does not propose at this point new or upgrades to any of these systems nor does the project require or will result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction of which could cause significant environmental effects. Any impact would be considered less than

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

significant.

b) Have sufficient water supplies available to serve the project from existing and reasonably foreseeable future development during normal, dry and multiple dry years? ☐ ☐ ☒ ☐

b) The project would receive water from the IID and appear to have sufficient water supplies available to serve the project from existing and reasonably foreseeable future development during normal, dry and multiple dry years. Nonetheless, the applicant will have to meet the requirements set forth by the Imperial Irrigation District in its comment letter dated October 3rd, 2024[14] and assess any potential impact. Any impacts are expected to be less than significant.

c) Result 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? ☐ ☐ ☒ ☐

c) The project proposes an on-site septic system with future leach field reserved on the western side of the property and a retention basin area on the eastern side. It does not appear to have an impact on any wastewater treatment provider. Therefore, less than significant impacts are expected.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? ☐ ☐ ☒ ☐

d) The proposed project does not appear to generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Any impacts are expected to be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? ☐ ☐ ☒ ☐

e) The project will be required to comply with all federal, state and local management and reduction statutes and regulations related to solid waste. Any impacts are expected to be less than significant.

XX. *WILDFIRE*

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan? ☐ ☐ ☒ ☐

a) The proposed Hydrazine processing facility is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones and it is designated as a Local Responsibility Area (LRA) zone per the California Department of Forestry and Fire Projection Map for Imperial County Draft Fire Hazard Draft Severity Zones in LRA. Additionally, Fire Department access and access roads shall be in accordance with the California Fire Code Chapter 5, with a width of at least 20 feet and all-weather surface capable of supporting fire apparatus. Fire Department access roads will be provided with a turn around approved by Imperial County Fire Department; as well as an approved fire safety and evacuation plan shall be developed and approved by the Fire Department. The evacuation plan shall be in accordance with California Fire Code Chapter 4. As mentioned in the Imperial County Fire Department comment letter dated October 24, 2024[35]. Compliance with the Imperial County Fire Department would bring any impact to be considered less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? ☐ ☐ ☒ ☐

b) The proposed Hydrazine processing facility is in an overall flat terrain, additionally all buildings and structures shall comply with the Imperial County Fire Department regulations, as mentioned in the Imperial County Fire Department comment letter dated October 24, 2024[35], which states that prevention measures and suppression systems must be incorporated to all required structures. The applicant would be subject to the Imperial County Fire Department requirements to ensure that any impacts related to wildfire risks exposing project occupants to pollutant concentrations from a wildfire would be less than significant.

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐

c) A route of access will be required to support safety and emergency response vehicles in all-weather situations; additionally, as mentioned in the Imperial County Fire Department comment letter dated October 24, 2024[35], per California Fire Code Chapter 5, section 503, there shall be at least two points of entry provided onto the project site. A KNOX Box and/or Locks will be required for all access gates and building entries as determined by the Imperial County Fire Department. An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code shall be installed and maintained (Minimum fire flow of 1500 GPM for 2 hours) in accordance with NFPA 20, 22, 24. Following these and additional requirements specified in the previously mentioned comment letter from the Imperial County Fire Department would bring impacts to less than significant levels.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

d) The proposed Hydrazine processing facility is in an overall flat terrain, and it is not located in a flooding zone, therefore it is not expected that it would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes. Compliance with all required sections of the fire code, and the Imperial County Fire Department comment letter dated October 24, 2024[35], would bring any Impacts to less than significant.

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino, (1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

Revised 2009- CEQA
Revised 2011- ICPDS
Revised 2016 – ICPDS
Revised 2017 – ICPDS
Revised 2019 – ICPDS

	Potentially Significant Impact (PSI)	Less than Significant with Mitigation Incorporated (LTSWMI)	Less Than Significant Impact (LTSI)	No Impact (NI)

SECTION 3
III. MANDATORY FINDINGS OF SIGNIFICANCE

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

a) Does the project have the potential to substantially 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal, eliminate tribal cultural resources or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☐
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.)	☐	☐	☐	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☐

EEC ORIGINAL PKG

IV. PERSONS AND ORGANIZATIONS CONSULTED

This section identifies those persons who prepared or contributed to preparation of this document. This section is prepared in accordance with Section 15129 of the CEQA Guidelines.

A. COUNTY OF IMPERIAL

- Jim Minnick, Director of Planning & Development Services
- Michael Abraham, AICP, Assistant Director of Planning & Development Services
- Diana Robinson, Planning Division Manager
- Luis Bejarano, Planner I
- Imperial County Air Pollution Control District
- Department of Public Works
- Fire Department
- Ag Commissioner
- Environmental Health Services
- Sheriff's Office

B. OTHER AGENCIES/ORGANIZATIONS

- Imperial Irrigation District
- County Executive Office
- Fort Yuma Quechan Indian Tribe
- Campo Band of Mission Indians Tribe

(Written or oral comments received on the checklist prior to circulation)

V. REFERENCES

1. "County of Imperial General Plan EIR", prepared by Brian F. Mooney & Associates in 1993; and as Amended by County in 1996, 1998, 2001, 2003, 2006 & 2008, 2015, 2016.
2. Imperial County General Plan: Circulation and Scenic Highway Element https://www.icpds.com/assets/planning/circulation-scenic-highway-element-2008.pdf
3. California State Scenic Highway System Map https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa
4. California Historic Resources: Imperial County https://ohp.parks.ca.gov/ListedResources/?view=county&criteria=13
5. California Farmland Mapping & Monitoring Program: Imperial County Important Farmland Map 2018 https://maps.conservation.ca.gov/DLRP/CIFF/
6. California Williamson Act Enrollment Finder https://maps.conservation.ca.gov/dlrp/WilliamsonAct/
7. Imperial County Air Pollution Control District comment letter dated October 15, 2024.
8. Imperial County General Plan: Conservation and Open Space Element https://www.icpds.com/assets/planning/conservation-open-space-element-2016.pdf
    a) Figure 1: Sensitive Habitat Map
    b) Figure 2: Sensitive Species Map
    c) Figure 3: Agency-Designated Habitats Map
    d) Figure 5: Areas of Heighten Historic Period Sensitivity Map
    e) Figure 6: Known Areas of Native American Cultural Sensitivity Map
    f) Figure 7: Seismic Hazards Map
    g) Figure 8: Existing Mineral Resources Map
9. California Department of Fish and Wildlife (CDFW) Lands Viewer https://apps.wildlife.ca.gov/lands/
10. *Global Lithium Energy Corporation Biological Resources Assessment Report.* (2024) Barrett's Biological Enterprise, Inc.
11. National Wetlands Inventory Map: Surface Waters and Wetlands https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/
12. U.S. Fish & Wildlife (USFWS) Critical Habitat for Threatened & Endangered Species Mapper https://www.arcgis.com/apps/Embed/index.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77&extent=-124.1522,38.0501,-121.4496,39.2098&zoom=true&scale=true&details=true&disable_scroll=true&theme=light
13. Fort Yuma Quechan Indian Tribe comment email dated October 03, 2024.
14. Imperial Irrigation District comment letter dated October 3, 2024.
15. California Geological Survey Hazard Program: Alquist-Priolo Fault Hazard Zones https://gis.data.ca.gov/maps/ee92a5f9f4ee4ec5aa731d3245ed9f53/explore?location=32.538703%2C-110.920388%2C6.00
16. California Department of Conservation: Fault Activity Map https://maps.conservation.ca.gov/cgs/fam/
17. United States Geological Survey's Quaternary Faults Map https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf
18. Imperial County General Plan: Seismic and Public Safety Element https://www.icpds.com/assets/planning/seismic-and-public-safety.pdf
    a) Figure 2: Regional Fault Lines
    b) Figure 3: Landslide Susceptibility
    c) Figure 4: Flood Hazards
    d) Figure 6: Fire Hazard Severity Zones
19. California Building Standards Commission, 2022 California Building Code.

California Code of Regulations, Title 24, Part 2, Volume 2 of 2.

20. California Tsunami Data Maps
    https://www.conservation.ca.gov/cgs/tsunami/maps
21. *Global Lithium Energy Corporation Geologic and Geothermal Data Summary*. (2024) AECOM.
22. California Geological Survey Landslide Map
    https://maps.conservation.ca.gov/cgs/informationwarehouse/landslides/
23. U.S. Department of Agriculture Soils Map
    https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
24. University of California Agriculture and Natural Resources SoilWeb Map
    https://casoilresource.lawr.ucdavis.edu/gmap/
25. California Department of Toxic Substances Control: EnviroStor
    https://www.envirostor.dtsc.ca.gov/public/
26. Imperial County Airport Land Use Compatibility Maps
    https://www.icpds.com/planning/maps/airport-land-use-compatibility-maps
27. CalFire: Fire Hazard Severity Zones in Local Responsibility Areas – Imperial County Map
    https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map-2022/fire-hazard-severity-zone-maps---lra/imperial_lra_draft_fhszl06_1_map13.pdf?rev=ae37a06cab87486b8814874bfa7cfb16&hash=4B1355741F43E2EE3852E0A4A20DE497
28. Imperial County Department of Public Works comment letter dated February 24, 2025.
29. County of Imperial Executive Office comment letter dated October 21, 2024.
30. Federal Emergency Management Agency (FEMA) Flood Map Service Center: Flood Insurance Rate Map
    https://msc.fema.gov/portal/search?AddressQuery=CALIPATRIA%20CA
    a) FEMA Zone A
       https://www.fema.gov/glossary/zone-0
31. Imperial County Renewable Energy and Transmission Element
    https://www.icpds.com/assets/planning/renewable-energy-and-transmission-element-2015.pdf
32. Imperial County General Plan: Noise Element
    https://www.icpds.com/assets/planning/noise-element-2015.pdf
33. Imperial County Sheriff's Office: Patrol Operations Map
    https://icso.imperialcounty.org/operations/
34. Imperial County Land Use Ordinance (Title 9), Division 16: Flood Damage Prevention Regulation
    https://www.icpds.com/assets/planning/renewable-energy-and-transmission-element-2015.pdf.
35. Imperial County Fire Department comment letter dated October 24, 2024
36. California Department of Conservation-Mineral Land Classification
    https://maps.conservation.ca.gov/cgs/minerals/?page=All-Data
37. Mesquite Lake Specific Plan, March 14, 2006
    https://www.icpds.com/assets/planning/specific-plans/mequite-lake/mesquite-lake-sp.pdf
38. Master Environmental Impact Report for The Mesquite Lake Specific Plan, February 1, 2006

NEGATIVE DECLARATION – County of Imperial

The following Negative Declaration is being circulated for public review in accordance with the California Environmental Quality Act Section 21091 and 21092 of the Public Resources Code.

Project Name: Conditional Use Permit (CUP) #24-0024
Initial Study (IS) #24-0034
Hydrazine Facility

Project Applicant: RASIRC Inc.

Project Location: The proposed project is located at 3555 Old Highway 111, Imperial, CA 92251, also identified under Assessor's Parcel Number 040-250-024-000, and legally described as PAR 4 PM 802 OF TR 58 14-14 9.59 AC. The property is approximately 9.59 acres and is located on an empty lot on the western side of the Old Highway 111, at about 200 ft away from the State Highway SR-111.

Description of Project:

The applicant submitted a CUP application for a N2H4 (Hydrazine) processing facility, with Initial Study #24-0034. The facility will include storage metal containers with appropriate cabinets and containers for raw chemical materials and waste, detached from the main building and constructed to store chemicals safely. The proposed building will be a total of 7,000 sq. ft. This building will be a warehouse facility with an office, parking, and site improvements. The building will have a driveway access from Old Highway 111. This project will be located at property identified under Assessor's Parcel Number (APN) 040-250-024-000, within the Mesquite Lake Specific Plan area. A total of 4 to 12 employees will be working in the warehouse/office, with daily operating hours estimated to be from 7:00 am to 5:00 pm approximately.

VI. FINDINGS

This is to advise that the County of Imperial, acting as the lead agency, has conducted an Initial Study to determine if the project may have a significant effect on the environment and is proposing this Negative Declaration based upon the following findings:

☐ The Initial Study shows that there is no substantial evidence that the project may have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.

☒ The Initial Study identifies potentially significant effects but:

(1) Proposals made or agreed to by the applicant before this proposed Mitigated Negative Declaration was released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur.

(2) There is no substantial evidence before the agency that the project may have a significant effect on the environment.

(3) Mitigation measures are required to ensure all potentially significant impacts are reduced to levels of insignificance.

A MITIGATED NEGATIVE DECLARATION will be prepared.

If adopted, the Negative Declaration means that an Environmental Impact Report will not be required. Reasons to support this finding are included in the attached Initial Study. The project file and all related documents are available for review at the County of Imperial, Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 (442) 265-1736.

NOTICE

The public is invited to comment on the proposed Negative Declaration during the review period.

4-24-2025 for

Date of Determination — Jim Minnick, Director of Planning & Development Services

The Applicant hereby acknowledges and accepts the results of the Environmental Evaluation Committee (EEC) and hereby agrees to implement all Mitigation Measures, if applicable, as outlined in the MMRP.

Applicant Signature — Date: 4-24-2025

EEC ORIGINAL PKG

SECTION 4

VIII. RESPONSE TO COMMENTS

(ATTACH DOCUMENTS, IF ANY, HERE)

IX. MITIGATION MONITORING & REPORTING PROGRAM (MMRP)

(ATTACH DOCUMENTS, IF ANY, HERE)

MITIGATION MONITORING AND REPORTING PROGRAM

Introduction

The Mitigation Monitoring and Reporting Program (MMRP) supplements the Initial Study/Mitigated Negative Declaration (IS/MND) for the proposed Hydrazine processing facility by providing a mechanism by which all measures in the IS/MND are implemented. The MMRP will be adopted by the County of Imperial Planning Commission in conjunction with the Project.

Purpose of the Mitigation Monitoring and Reporting Program

As the lead agency, the County is responsible for implementing the MMRP, which has been prepared in conformance with Section 21081.6 of the California Public Resources Code as identified below:

> (a) When making the findings required by paragraph (1) of subdivision (a) of Section 21081 or when adopting a mitigated negative declaration pursuant to paragraph (2) of subdivision (c) of Section 21080, the following requirements shall apply:
>
> > (1) The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.
> >
> > (2) The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.

The MMRP consists of mitigation measures that avoid, reduce, or fully mitigate potential environmental impacts. The mitigation measures have been identified and recommended through preparation of the IS/MND and drafted to meet the requirements of the California Environmental Quality Act (CEQA) Guidelines, Section 15097.

Mitigation Monitoring and Reporting Program Table

Project-specific mitigation measures are contained in the MMRP Table below. The table describes the specific mitigation measures, the responsible party that must comply with the mitigation measure, the regulatory agency having approval of and oversight over the mitigation measure, and the mitigation timeframe describing the timing and/or time range that applies to the mitigation measure. The MMRP will serve as the basis for scheduling the implementation of and compliance with all mitigation measures.

RASIRC IMPERIAL FACILITY
CONDITIONAL USE PERMIT (CUP) #24-0024 / INITIAL STUDY (IS) #24-0034
MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	RESPONSIBLE PARTY	REGULATORY AGENCY	MITIGATION TIMEFRAME
SECTION III. AIR QUALITY			
MM AQ-1: The applicant must provide a Health Risk Assessment (HRA) referencing the current CEQA Air Quality Handbook for Imperial County. An Air District Permit and an application for engineering review of the project will need to be submitted along with the design specifications and the HRA for review by the Air Pollution Control District. Any relative humane exposure, location of the project, distance to sensitive receptors should be considered when developing the risk assessment.	RASIRC INC.	Imperial County	Prior to Planning Commission
SECTION IV. BIOLOGICAL RESOURCES			
MM BIO-1: Prior to grading or construction, an initial survey to determine the presence of burrowing owls shall be conducted between February and September by a biologist that has been determined by the USFWS as qualified to conduct burrowing owl surveys. The survey shall be conducted in accordance with the latest USFWS-approved guidelines. A report on the results of the survey and recommended avoidance or mitigation measures shall be provided by the applicant to the USFWS, CDFW, and Imperial County Planning and Development Services Department. No clearing or ground-disturbing activities may be taken until the report and recommendations have been accepted by the USFWS, CDFG, and Imperial County Planning and Development Services Department. All burrowing owls found on the project site shall be tagged by USFWS-qualified burrowing owl biologist. If burrowing owl burrows are found present within construction areas and a 50-meter (165-foot) boundary of construction limits, avoidance is the preferred level of mitigation. If avoidance cannot be met, or no burrowing owls were detected during the first survey, a second survey shall be conducted no less than 30 days prior to any clearing, ground disturbance, or demolition of existing structures. If no burrowing owls are present, a third survey shall be conducted no less than five days prior to the commencement of construction and, if no burrowing owls are present, clearing, grading, demolition, or construction may commence. If burrowing owls were present at the time of the second survey and CDFW and USFWS Office of Law Enforcement concur, on-site passive relocation can be implemented. The project biologist shall evaluate the suitability of nearby habitat, the availability of an existing or constructed alternate burrow for each burrow excavated, and the opportunity for preservation of the site, such as through a conservation easement that would be managed to promote burrowing owl use of the site. Relocation requires that owls should be excluded flow burrows in the immediate impact zone and 50-meter buffer zone by installing one-way doors in burrow entrances, left in place for 48 hours before excavation. Relocation of owls should only be implemented during the nonbreeding season.	RASIRC INC.	Imperial County, California Department of Fish & Wildlife (CDFW), US Fish & Wildlife Service (USFWS)	Prior to the Start of Construction

CUP24-0024 / IS24-0034

COMMENT LETTERS

EEC ORIGINAL PKG

COUNTY OF IMPERIAL

DEPARTMENT OF PUBLIC WORKS

155 S. 11th Street
El Centro, CA
92243

Tel: (442) 265-1818
Fax: (442) 265-1858

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https://twitter.com/CountyDpw/

Public Works works for the Public

ICDPW

February 24, 2025

RECEIVED

FEB 25 2025

IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

Mr. Jim Minnick, Director
Planning & Development Services Department
801 Main Street
El Centro, CA 92243

Attention: Luis Bejarano, Planner I

SUBJECT: **CUP 24-0024 -Rasirc**
Located on Highway 111, Imperial. CA
APN 040-250-024

Dear Mr. Minnick:

This letter is in response to your submittal received by this department on October 2, 2024, for the above-mentioned project. The applicant proposes a N2H4 (hydrazine) processing and production facility including storage metal containers.

Department staff has reviewed the package information and the following shall be conditions of approval:

1. A trip generation and distribution analysis report shall be prepared by a traffic engineer licensed in the State of California and submitted to this Department for review and approval. Existing traffic counts on Old Highway 111 south of Keystone Road and Keystone Road west of Old Highway 111 shall be obtained and included in the analysis report. The analysis report shall include fair share calculations related to the project's traffic impacts within the Mesquite Lake Specific Plan Area. The Applicant shall be responsible for the fair share contributions identified on this report. The trip generation and distribution analysis report shall be submitted to this Department prior to issuance of Building Permit. The fair share contributions shall be paid to this Department prior to the issuance of the Certificate of Occupancy.
2. The Applicant shall furnish a Drainage and Grading Plan/Study to provide for property grading and drainage control, which shall also include prevention of sedimentation of damage to off-site properties. The Study/Plan shall be submitted to the Department of Public Works for review and approval. The applicant shall implement the approved plan. Employment of the appropriate Best Management Practices (BMP's) should be included (Per Imperial County Code of Ordinances, Chapter 12.10.020 B).
3. An encroachment permit shall be secured from this department for any construction and/or construction related activities within County Right-of-Way. Activities to be covered under an encroachment permit shall include the installation of, but not be limited to, stabilized construction entrances, driveways, road improvements, temporary traffic control devices, etc.

EEC ORIGINAL PKG

4. Prior to the issuance grading and building permits, a stabilized construction entrance shall be installed under an encroachment permit from this department.
5. The Developer shall repair any damage caused to County Roads during construction and maintain such roads in safe conditions as determined by the Imperial County Road Commissioner. Said road repairs shall be completed under an encroachment permit from this department.
6. All off-site improvements within Imperial County right-of-way shall be financially secured by either a road improvement bond or letter of credit as approved by this department. No encroachment, building or grading permits shall be issued until such time said financial security has been provided.
7. All permanent structures abutting public roads shall be located outside County right-of-way, public utility easements, and drainage easements.
8. All on-site traffic areas shall be hard surfaced to provide all weather access for emergency vehicles. The surfacing shall meet the Department of Public Works and Fire/Office of Emergency Services (EOS) Standards as well as those of the Air Pollution Control District (APCD).
9. A Transportation Permit may be required from road agencies having jurisdiction over the haul route(s) for any hauls of heavy equipment and/or large vehicles which impose greater than legal loads on riding surfaces, including bridges. (Per Imperial County Code of Ordinances, Chapter 10.12 – Overweight Vehicles and Loads).

INFORMATIVE

- All solid and hazardous waste shall be disposed of in approved solid waste disposal sites in accordance with existing County, State and Federal regulations (Per Imperial County Code of Ordinances, Chapter 8.72).
- The project may require a National Pollutant Discharge Elimination System (NPDES) permit and Notice of Intent (NOI) from the Regional Water Quality Control Board (RWQCB) prior county approval of onsite grading plan (40 CFR 122.28).

Should you have any questions, please do not hesitate to contact this office. Thank you for the opportunity to review and comment on this project.

Respectfully,

John A. Gay, PE
Director of Public Works

By:

Francisco Olmedo, PE,
Principal Engineer

150 SOUTH NINTH STREET
EL CENTRO, CA 92243-2850

TELEPHONE: (442) 265-1800
FAX: (442) 265-1799

AIR POLLUTION CONTROL DISTRICT

RECEIVED
By Imperial County Plannning & Development Services at 4:06 pm, Oct 16, 2024

October 15, 2024

Jim Minnick, Director
Imperial County Planning & Development Services
801 Main Street
El Centro, CA 92243

SUBJECT: Conditional Use Permit 24-0024 – Duggins Construction Inc

Dear Mr. Minnick,

The Imperial County Air Pollution Control Districts (Air District) thanks you for the opportunity to review and comment on Conditional Use Permit (CUP) 24-0024 (Project). The project proposes a facility for the processing and production of Hydrazine (N_4H_4). The project proposes a 7000 sqft warehouse with an office, parking, and site improvements located within the Mesquite Lake Specific Plan area also identified with Assessor's Parcel Number 040-250-024.

As you know, the Air District's established programs help to keep the quality of air in Imperial County from declining. The programs, Rules and Regulations of the Air District in conjunction with the California Environmental Quality Act (CEQA), the most current CEQA Air Quality Handbook for Imperial County (Handbook), and the Air District's State Implementation Plans (SIPs) for Ozone, $PM_{2.5}$ and PM_{10} work together to ensure that air quality improves or does not degrade. Currently, the non-attainment status of marginal for the 2015 ozone standard, moderate for $PM_{2.5}$ and the maintenance requirements for PM_{10} are the driving criteria in establishing the thresholds for NOx, ROG, PM_{10}, SOx and CO found in the Handbook. These thresholds and their significance are explained under Section 6 of the handbook.

The Air District informs the applicant that at minimum the project will require an Air District permit and an application for engineering review of the project will need to be submitted along with the design specifications and an HRA as Hydrazine is identified by the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) as a Hazardous Air Pollutant and Air Toxic Pollutant. Section 4.6 of the Handbook states "development projects . . . which have the potential to emit toxic or hazardous air pollutants . . . may be required to prepare a health risk assessment to determine the potential level of risk associated with the operation. The ICAPCD should be consulted on any project with the potential to emit toxic or hazardous air pollutants." Typically, these health risk assessments are of a quantitative nature but can be a mixed qualitative and quantitative analysis. In any case, the relative human exposure, location of the project, distance to sensitive receptors all should be considered when developing the risk assessment.

EEC ORIGINAL PKG

The project packet did not include any AQA or HRA for review at this point of the project and the Air District strongly recommends referencing the Handbook during the generation of Air Quality Analysis (AQA) and Health Risk Assessment (HRA) as the Handbook has helpful information regarding the development of an adequate air quality analysis and emission thresholds for the Air District.

The Air District also reminds the applicant that the project and any future construction must comply with all Air District rules and regulations and the Air District would emphasize Regulation VIII – Fugitive Dust Rules, a collection of rules designed to maintain fugitive dust emissions below 20% visual opacity.

The Air District requests a copy of the draft CUP prior to recording for review.

The Air District's rules and regulations can be found online for your review at https://apcd.imperialcounty.org/rules-and-regulations/, the Handbook can be accessed at https://apcd.imperialcounty.org/wp-content/uploads/2020/01/CEQAHandbk.pdf, and permitting forms can be found at https://apcd.imperialcounty.org/engineering/. Should you have any questions please feel free to contact the Air District for assistance at (442) 265-1800.

Respectfully,

Ismael Garcia
Environmental Coordinator

Reviewed Electronically by,
Monica N. Soucier
APC Division Manager

ADMINISTRATION / TRAINING
1078 Dogwood Road
Heber, CA 92249

Administration
Phone: (442) 265-6000
Fax: (760) 482-2427

Training
Phone: (442) 265-6011

OPERATIONS/PREVENTION
2514 La Brucherie Road
Imperial, CA 92251

Operations
Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention
Phone: (442) 265-3020

October 24, 2024

RE: N2H4 (Hydrazine) Processing Facility
Hwy 111, Imperial CA 92251 APN: 040-250-024
CUP #24-0024, IS #24-0034

Imperial County Fire Department Fire Prevention Bureau would like to thank you for the opportunity to review and comment on the proposed Hydrazine processing facility, CUP #24-0024.

The project description is developing and operating a N2H4 (Hydrazine) processing and production facility. The proposed facility will be a building with a total of 7,000 square feet, storage metal containers, tanks, raw chemical materials and waste.

Fire Department requirements are the following:

- Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
- Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503. Minium two points of entry shall be provided into the project site.
- KNOX Box and/or Locks will be required for all access gates and building entry as determined by Imperial County Fire Department.
- An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code Shall be installed and maintained. (Minimum fire flow of 1500 GPM for 2 hours) Private fire service mains and appurtenance shall be installed in accordance with NFPA 20, 22, 24
- An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code Chapter 9. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.
- An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code Chapter 9. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.
- Hazard identification and signs shall be provided as required by the California Fire Code and NFPA.

ADMINISTRATION / TRAINING
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- Hazardous material leak and/or release mitigation equipment shall be onsite in an approved location determined by Imperial County Fire Department officials. Additional equipment may be required upon review.
- Compliance with all required sections of the fire code.
- Applicants shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.
- An emergency response/action plan shall be prepared and approved by the Imperial County Fire/OES Department.
- A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.
- A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.
- All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to the Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan.

Cost Recovery

- The applicant shall provide cost reimbursement for direct fire protection and hazardous material response services. Service rate will be consistent with Imperial County Fire Department adopted fee schedule. Cost reimbursement will be from time of call to the conclusion of the incident as defined by the fire department.

Again, thank you for the opportunity to comment. Imperial County Fire Department reserves the right to comment and request additional requirements pertaining to this project regarding fire and life safety measures, California building and fire code, and National Fire Protection Association standards at a later time as we see necessary.

If you have any questions, please contact the Imperial County Fire Prevention Bureau at 442-265-3020 or 442-265-3021.

Sincerely

Andrew Loper

Andrew Loper
Lieutenant/Fire Prevention Specialist
Imperial County Fire Department
Fire Prevention Bureau

ADMINISTRATION / TRAINING
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Fax: (760) 355-1482

Prevention
Phone: (442) 265-3020

CC: David Lantzer Fire Chief
Imperial County Fire Department

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October 3, 2024

RECEIVED

By Imperial County Planning & Development Services at 9:29 am, Oct 03, 2024

Mr. Luis Bejarano
Planner I
Planning & Development Services Department
County of Imperial
801 Main Street
El Centro, CA 92243

SUBJECT: Hydrazine Processing Facility Project; CUP #24-0024, IS #24-0034

Dear Mr. Bejarano:

On October 2, 2024, the Imperial Irrigation District received from the Imperial County Planning & Development Services Department, a request for agency comments on a hydrazine processing facility project; Conditional Use Permit No. 24-0024, Initial Study No. 24-0034. The applicant, Duggins Construction, Inc.; proposes building a 5,000 sq. ft. facility for N2H4 (Hydrazine) processing and production. The facility will include warehouse, office, parking areas and appropriate storage cabinets and containers for raw chemical materials and waste detached from the main building. A total of 8 to 10 employees will be working in the warehouse/office. The site is located on E. Keystone Road & Old Hwy. 111, 5 miles south of Brawley, California (APN 040-250-024).

The IID has reviewed the project information and found that the comments provided in the July 10, 2024 district letter (see attached) continue to apply. However, when a project goes through the CEQA compliance process, it is important to bear in mind that to address the project impacts to the electrical utility (i.e., the IID electrical grid), considered under the environmental factor "Utilities and Services" of the Environmental Checklist/Initial Study, and determine if the project would require or result in the relocation or construction of new or expanded electric power facilities, the construction or relocation of which could cause significant environmental effects; a circuit study/distribution impact study, facility study, and/or system impact study must be performed

Should you have any questions, please do not hesitate to contact me at 760-482-3609 or at dvargas@iid.com. Thank you for the opportunity to comment on this matter.

Respectfully,

Donald Vargas
Compliance Administrator II

Jamie Asbury – General Manager
Mike Pacheco – Manager, Water Dept.
Matthew H Smelser – Manager, Power Dept.
Paul Rodriguez – Deputy Mgr. Power Dept.
Geoffrey Holbrook – General Counsel
Michael P. Kemp – Superintendent General, Fleet & Compliance Services
Laura Cervantes. – Supervisor, Real Estate
Jessica Humes – Environmental Project Mgr. Sr., Water Dept.

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July 10, 2024

Mr. Luis Valenzuela
Planner II
Planning & Development Services Department
County of Imperial
801 Main Street
El Centro, CA 92243

SUBJECT: Hydrazine Facility Pre-Application

Dear Mr. Valenzuela:

On July 9, 2024, the Imperial Irrigation District received from the Imperial County Planning & Development Services Department, a request for agency comments on the Pre-Application for a Hydrazine Facility. The applicant, Kurt Christian/ Duggins Construction, Inc.; proposes building a 5,000 sq. ft. facility for N2H4 (Hydrazine) processing and production. The facility will include warehouse, office, parking areas and appropriate storage cabinets and containers for raw chemical materials and waste detached from the main building. A total of 8 to 10 employees will be working in the warehouse/office. The site is located on E. Keystone Road & Old Hwy. 111, 5 miles south of Brawley, California (APN 040-250-024).

The IID has reviewed the application and has the following comments:

1. If and when the project needs electrical service, the applicant should be advised to contact Ignacio Romo, IID project development planner, at (760) 482-3426 or e-mail Mr. Romo at IGRomo@IID.com to initiate the customer service application process. In addition to submitting a formal application (http://www.iid.com/home/showdocument?id=12923), the applicant will be required to submit an AutoCAD file of site plan, approved electrical plans, electrical panel size and panel location, operating voltage, electrical loads, project schedule, and the applicable fees, permits, easements and environmental compliance documentation pertaining to the provision of electrical service to the project. The applicant shall be responsible for all costs and mitigation measures related to providing electrical service to the project.

2. Electrical capacity is limited in the project area. A circuit study may be required. Any system improvements or mitigation identified in the circuit study to enable the provision of electrical service to the project shall be the financial responsibility of the applicant.

3. Applicant shall provide a surveyed legal description and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID as necessary to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.

4. IID water facilities that could be impacted include the Redwood Lateral 7 Spill Pipeline and Rose Drain No. 10, located adjacent to the parcel's south boundary.

5. The project's retention basin may impact IID drains with project site runoff flows draining into IID drains. To mitigate impacts, the project may require a comprehensive IID hydraulic drainage system analysis. The drainage system analysis includes an associated drain impact fee.

6. To properly assess the impacts to IID water facilities, applicant should submit project plans, including grading & drainage and fencing plans, to IID Water Department Engineering Services for review and comment prior to final project design approval. IID WDES can be contacted at (760) 339-9265 for further information on this matter.

7. The applicant will be required to provide and bear all costs associated with acquisition of rights of way, easements, and infrastructure relocations deemed necessary to accommodate street or road improvements imposed by the municipality or County.

8. The applicant will be required to provide rights of ways and easements for any proposed power line extensions and/or any other infrastructure needed to serve the project as well as the necessary access to allow for continued operation and maintenance of any IID facilities located on adjoining properties.

9. To obtain water for construction purposes, the applicant should contact IID South End Division at (760) 482-9800.

10. For information regarding water supply policies and long-term water supply requests, the applicant should contact Ms. Justina Gamboa-Arce, IID senior water resources planner, at (760) 339-9085 or e-mail Ms. Gamboa-Arce at jgamboaarce@IID.com.

11. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to: surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances). A copy of the IID encroachment permit application and instructions for its completion are available at the website https://www.iid.com/about-iid/department-directory/real-estate. No foundations or buildings will be allowed within IID's right of way. The IID Real Estate Section should be contacted at (760) 339-9239 for additional information regarding encroachment permits or agreements.

12. An IID encroachment permit is required to utilize existing surface-water drainpipe connections to drains and receive drainage service form IID. Surface-water drainpipe connections are to be modified in accordance with IID Water Department Standards. A construction storm-water permit from the California Regional Water Quality Control Board is required before commencing construction and an industrial storm water permit from

CRWQCB is required for the operation of the proposed facility. The project's Storm Water Pollution Prevention Plan and the storm-water permit are to be submitted to IID.

13. In addition to IID's recorded easements, IID claims, at a minimum, a prescriptive right of way to the toe of slope of all existing canals and drains. Where space is limited and depending upon the specifics of adjacent modifications, the IID may claim additional secondary easements/prescriptive rights of ways to ensure operation and maintenance of IID's facilities can be maintained and are not impacted and if impacted mitigated. Thus, IID should be consulted prior to the installation of any facilities adjacent to IID's facilities. Certain conditions may be placed on adjacent facilities to mitigate or avoid impacts to IID's facilities.

14. Any new, relocated, modified or reconstructed IID facilities required for and by the project (which can include but is not limited to electrical utility substations, electrical transmission and distribution lines, water deliveries, canals, drains, etc.) need to be included as part of the project's California Environmental Quality Act (CEQA) and/or National Environmental Policy Act (NEPA) documentation, environmental impact analysis and mitigation. Failure to do so will result in postponement of any construction and/or modification of IID facilities until such time as the environmental documentation is amended and environmental impacts are fully analyzed. Any and all mitigation necessary as a result of the construction, relocation and/or upgrade of IID facilities is the responsibility of the project proponent.

Should you have any questions, please do not hesitate to contact me at 760-482-3609 or at dvargas@iid.com. Thank you for the opportunity to comment on this matter.

Respectfully,

Donald Vargas
Compliance Administrator II

Jamie Asbury – General Manager
Mike Pacheco – Manager, Water Dept.
Matthew H Smelser – Manager, Energy Dept.
Paul Rodriguez – Deputy Mgr. Energy Dept.
Geoffrey Holbrook – General Counsel
Michael P. Kemp – Superintendent General, Fleet Services and Reg. & Environ. Compliance
Laura Cervantes. – Supervisor, Real Estate
Jessica Humes – Environmental Project Mgr. Sr., Water Dept.

EEC ORIGINAL PKG

COUNTY EXECUTIVE OFFICE

Miguel Figueroa
County Executive Officer
miguelfigueroa@co.imperial.ca.us
www.co.imperial.ca.us

County Administration Center
940 Main Street, Suite 208
El Centro, CA 92243
Tel: 442-265-1001
Fax: 442-265-1010

July 9, 2024

TO: Luis Bejarano, Planning and Development Services Department

FROM: Rosa Lopez, Executive Office

SUBJECT: Request for Comments – N2H4 (Hydrazine) Processing and Production Project / APN 040-250-024

The County of Imperial Executive Office is responding to a request for comments: N2H4 (Hydrazine) Processing and Production Project / APN 040-250-024. The Executive Office would like to inform the developer of conditions and responsibilities of the applicant seeking a Conditional Use Permit (CUP). The conditions commence prior to the approval of an initial grading permit and subsequently continue throughout the permitting process. This includes, but not limited to:

- Sales Tax Guarantee. The permittee is required to have a Construction Site Permit reflecting the project site address, allowing all eligible sales tax payments are allocated to the County of Imperial, Jurisdictional Code 13998. The permittee will provide the County of Imperial a copy of the CDTFA account number and sub-permit for its contractor and subcontractors (if any) related to the jobsite. Permittee shall provide in written verification to the County Executive Office that the necessary sales and use tax permits have been obtained, prior to the issuance of any grading permits.
- Construction/Material Budget: The permittee will provide the County Executive Office a construction materials budget: an official construction materials budget or detailed budget outlining the construction and materials cost for the processing facility on permittee letterhead.
- At developers cost, the County Executive Office shall hire a third-party consultant to produce a Fiscal and Economic Impact Analysis & Job and Employment Analysis (FEIA & JEIA) prior to project being placed on Planning Commission meeting.

Should there be any concerns and/or questions, do not hesitate to contact me.

Luis Bejarano

From: Rosa Lopez
Sent: Tuesday, March 25, 2025 5:58 PM
To: 'Oscar Grijalva'; Melissa Gomez
Cc: Avery Moler; Kurt Christian; Jim Minnick; Luis Bejarano
Subject: RE: Hydrazine Project - APN 040-250-024

Mr. Grijalva.

Good afternoon,

Thank you for following up. After reviewing the submitted information, the Executive Office has determined that the Hydrazine Project – APN 040-250-024 appears to meet, to the best of its ability, the requirements outlined in the sales tax condition. However, to ensure full compliance, our office will continue to monitor the project throughout the construction process and conduct periodic confirmations as needed.

Based on our assessment, we find that this project is in a position to proceed with the entitlement and permitting process. Please do not hesitate to reach out should any further clarification or additional documentation be required.

Thank you for your time and effort on this matter.

Rosa

Rosa C. López-Solis
EXECUTIVE OFFICE BUDGET AND PROGRAM ADMINISTRATOR

COUNTY OF IMPERIAL
COUNTY EXECUTIVE OFFICE
PH 442.265.1001
FX 760.352.7876
E-MAIL ROSALOPEZ@CO.IMPERIAL.CA.US

From: Oscar Grijalva <oscar@dugginsconstruction.com>
Sent: Monday, March 24, 2025 9:06 AM
To: Rosa Lopez <RosaLopez@co.imperial.ca.us>; Melissa Gomez <melissa@dugginsconstruction.com>
Cc: Avery Moler <avery@dugginsconstruction.com>; Kurt Christian <kchristian@rasirc.com>; Jim Minnick

EEC ORIGINAL PKG

Luis Bejarano

From: Frank Reece <historicpreservation@quechantribe.com>
Sent: Thursday, October 3, 2024 10:36 AM
To: Aimee Trujillo
Subject: RE: [EXTERNAL]:CUP24-0024/ IS24-0024 - Request for Comments

Good morning,
This email is to inform you that we do not wish to comment on this project.

Jill

H. Jill McCormick M.A.
Ft. Yuma Quechan Indian Tribe
P.O. Box 1899
Yuma, AZ 85366-1899
Office: 760-919-3631

From: Aimee Trujillo <aimeetrujillo@co.imperial.ca.us>
Sent: Wednesday, October 02, 2024 4:58 PM
To: Antonio Venegas <AntonioVenegas@co.imperial.ca.us>; Ashley Jauregui <AshleyJauregui@co.imperial.ca.us>; Jolene Dessert <JoleneDessert@co.imperial.ca.us>; Margo Sanchez <MargoSanchez@co.imperial.ca.us>; Belen Leon-Lopez <BelenLeon@co.imperial.ca.us>; Monica Soucier <MonicaSoucier@co.imperial.ca.us>; Jesus Ramirez <JesusRamirez@co.imperial.ca.us>; John Hawk <johnhawk@co.imperial.ca.us>; Miguel Figueroa <miguelfigueroa@co.imperial.ca.us>; Rebecca Terrazas-Baxter <RebeccaTerrazas-Baxter@co.imperial.ca.us>; Rosa Lopez <RosaLopez@co.imperial.ca.us>; Bari Bean <baribean@co.imperial.ca.us>; Jeff Lamoure <JeffLamoure@co.imperial.ca.us>; Jorge Perez <JorgePerez@co.imperial.ca.us>; Alphonso Andrade <AlphonsoAndrade@co.imperial.ca.us>; Marco Topete <marcotopete@co.imperial.ca.us>; Sheila Vasquez-Bazua <sheilavasquezbazua@co.imperial.ca.us>; Andrew Loper <AndrewLoper@co.imperial.ca.us>; David Lantzer <davidlantzer@co.imperial.ca.us>; rkelly@icso.org; Fred Miramontes <fmiramontes@icso.org>; Robert Benavidez <RBenavidez@icso.org>; dvargas@iid.com; kimberly.dodson@dot.ca.gov; roger.sanchez-rangel@dot.ca.gov; robert.krug@dtsc.ca.gov; marcuscuero@campo-nsn.gov; jmesa@campo-nsn.gov; Frank Reece <historicpreservation@quechantribe.com>; Tribal Secretary <tribalsecretary@quechantribe.com>
Cc: Jim Minnick <JimMinnick@co.imperial.ca.us>; Michael Abraham <MichaelAbraham@co.imperial.ca.us>; Diana Robinson <DianaRobinson@co.imperial.ca.us>; Luis Bejarano <luisbejarano@co.imperial.ca.us>; Aimee Trujillo <aimeetrujillo@co.imperial.ca.us>; Jenyssa Gutierrez <jenyssagutierrez@co.imperial.ca.us>; Kamika Mitchell

CUP24-0024 / IS24-0034

APPLICATION

EEC ORIGINAL PKG

CONDITIONAL USE PERMIT

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.
801 Main Street, El Centro, CA 92243 (442) 265-1736

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES – Please type or print -

1. PROPERTY OWNER'S NAME: RASIRC	EMAIL ADDRESS: JS@RASIRC.COM	
2. MAILING ADDRESS (Street / P O Box, City, State): 7815 Silverton Ave, San Diego CA &	ZIP CODE: 92126	PHONE NUMBER: 858 259 1220
3. APPLICANT'S NAME: Duggins Construction, Inc.	EMAIL ADDRESS: melissa@dugginsconstruction.com/ iris@dugginsconstruction.com	
4. MAILING ADDRESS (Street / P O Box, City, State): 341 W. Crown Court, Imperial, CA.	ZIP CODE: 92251	PHONE NUMBER: (760) 355-5600
4. ENGINEER'S NAME / CA. LICENSE NO.	EMAIL ADDRESS	
5. MAILING ADDRESS (Street / P O Box, City, State)	ZIP CODE	PHONE NUMBER

6. ASSESSOR'S PARCEL NO.: 040-250-024	SIZE OF PROPERTY (In acres or square foot): 9.59 Acres	ZONING (existing): ML-I-2-RE
7. PROPERTY (site) ADDRESS: E. Key Stone Rd., Imperial, CA. 92251 — 3555 Old Highway 111, Imperial CA		
8. GENERAL LOCATION (i.e. city, town, cross street): Imperial, E. Key Stone Road and Old Highway 111		
9. LEGAL DESCRIPTION: PAR 4 PM 802 OF TR 58 14-14 9.59 AC		

PLEASE PROVIDE CLEAR & CONCISE INFORMATION (ATTACH SEPARATE SHEET IF NEEDED)

10. DESCRIBE PROPOSED USE OF PROPERTY (list and describe in detail):	New 7,000 sq.ft. warehouse facility for N2H4 (Hydrazine) processing and production, with an office, parking and site improvements.
11. DESCRIBE CURRENT USE OF PROPERTY	Vacant
12. DESCRIBE PROPOSED SEWER SYSTEM	Septic Tank
13. DESCRIBE PROPOSED WATER SYSTEM	IID irrigation ditch w/a private potable water system
14. DESCRIBE PROPOSED FIRE PROTECTION SYSTEM	Fire Sprinklers

15. IS PROPOSED USE A BUSINESS? ☒ Yes ☐ No	IF YES, HOW MANY EMPLOYEES WILL BE AT THIS SITE? 4-8

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT.

Jeffery Spiegelman — Print Name — Date: 8/19/24

Signature

Print Name — Date

Signature

REQUIRED SUPPORT DOCUMENTS

A. SITE PLAN
B. FEE
C. OTHER
D. OTHER

APPLICATION RECEIVED BY: BJ	DATE: 09/03/24	REVIEW / APPROVAL BY OTHER DEPT'S required	
APPLICATION DEEMED COMPLETE BY:	DATE	☐ P W.	
APPLICATION REJECTED BY:	DATE	☐ E H S.	
TENTATIVE HEARING BY:	DATE	☐ A P C D	
FINAL ACTION: ☐ APPROVED ☐ DENIED	DATE	☐ O E S	
		☐	
		☐	

CUP # 24-0024 IS24-0034

EEC ORIGINAL PKG

DUGGINS CONSTRUCTION INC
PARTNERS IN DEVELOPMENT
LIC. NO. CA 290934 - AZ ROC102184
341 West Crown Court, Imperial, CA 92251, Phone:(760)355-5600 Fax:(760)355-6756

DESCRIPTION LETTER

TO: COUNTY OF IMPERIAL (PLANNING AND DEVELOPMENT SERVICES)

FROM: DUGGINS CONSTRUCTION – MELISSA GOMEZ

SUBJECT: HYDRAZINE – CONDITIONAL USE PERMIT APPLICATION

DATE: 03/25/2025

CC:

We are submitting this letter regarding a Conditional Use Permit application for a property located near Old Highway 111 Road, under APN: 040-250-024.

This site is currently an undeveloped dirt parcel. The north side of the property abuts a solar plant. The east of the property abuts Old Highway 111. The West side of the property abuts an undeveloped dirt parcel. The South abuts the Redwood lateral & Mesquite Lake Water and Power Plant.

The proposed building will be a total of 7,000 sq. ft. This building will be a warehouse facility with an office, parking and site improvements. The building will have a driveway access from Old Highway 111.

The proposed building is a facility for N2H4 (Hydrazine) processing, ensuring safe handling and compliance with industry standards. The facility will include storage metal containers with appropriate cabinets and containers for raw chemical materials and waste, detached from the main building and constructed to store chemicals safely. The hydra- storage is required near the building because there is going to be a double wall pipe (to prevent leaks) connected from the storage to the building to route the hydrazine for processing. The office portion of the building is located at the east side, near the parking lot. A total of 4 to 12 employees will be working in the warehouse/office and will conduct normal business hours between 7 am and 5 pm.

This site will provide 15 automobile parking stalls as required by the County of Imperial zoning ordinance. A box delivery truck (UPS truck) will have access to the unloading area for shipping and receiving, approximately 5 to 10 times a month.

If there are any questions or concerns, please feel free to call me at 760-355-5600 or email at melissa@dugginsconstruction.com

EEC ORIGINAL PKG

RASIRC – IMPERIAL
Planned Site Use and Traffic

7815 Silverton Ave
San Diego, CA 92126
858.259.1220 / 858.259.0123 fax
www.rasirc.com

Business Activity Summary

RASIRC will conduct normal business hours between 7am and 5pm with 4-12 employees working a typical 8 hour day.

Work performed will be light production made up of receiving small quantities of liquids (typically less than 5 gallons), purifying liquids by using filters and other solid media such as pellets of aluminum oxide, and then filling small vessels with purified liquid. Vessels range in size from 1.5 liters to 4 liters in size (1/2 to 1 gallon) and are individually packaged for shipment to customers worldwide.

The production volume will initially be low, consisting of shipments several times per month with future volumes approaching several times per week. Product shipments and raw material deliveries will be provided by FedEx or UPS and occur several times per week. Times may vary depending on the delivery routes and schedules of the transportation companies.

RASIRC Products are sold to Semiconductor manufacturers and are usually sold through distributors or directly through our office in San Diego. Customers do not visit the site for purposes of sales or inquiry. There will be no customer traffic at this location.

Vehicle traffic would consist of weekday commuting of employees and infrequent shipments and deliveries of goods. During the start-up phase, traffic will potentially be greater as the equipment for the plant operation will be delivered, qualified and placed into service. There will also be visits from the San Diego facility to ensure facility startup and operational readiness. We would assume the number of vehicles on site would be proportional to the number of employees. RASIRC does not have any fleet vehicles or machinery other than a forklift for shipping and receiving purposes.

Kurt Christian
Director Facilities and Construction
RASIRC Inc

EEC ORIGINAL PKG

Proposed Business Description

for Hydrazine Processing

7815 Silverton Ave
San Diego, CA 92126
858.259.1220 / 858.259.0123 fax
www.rasirc.com

Description of activities to be performed at the site:

RASIRC produces ultra-pure Hydrazine (N_2H_4) for use in Semiconductor manufacturing processes.

We receive raw, unpurified hydrazine from a manufacturer in Lake Charles, Louisiana and process it to remove any remaining moisture. This purified hydrazine is then used to fill small vessels, up to 4 liters, which are then shipped to customers worldwide.

1. Business Overview

- RASIRC INC provides highly purified Brute® Hydrazine to semiconductor manufacturing companies for various uses in the production of integrated circuits and other products. These companies are located throughout the world and rely upon our products to leverage advances in efficiency and product development. We currently ship to Europe, Japan and Asia and expect to expand our business to other regions in the future.
- Initial operation requirements call for normal operating hours from 7am to 5pm daily. Employees would initially number 4 to 12 with responsibilities in facilities and safety management, production management and process control. The facility would be a secured, closed environment with access-controlled building (badging) inside a fenced environment (gated entry).
- We will receive low grade hydrazine chemical shipped under UN 2029 that typically has contaminates and moisture levels in the 0.01% range of the total composition. We then purify and dry the hydrazine so that the moisture levels are less than 0.0000001% of the total composition. This level of purity is necessary for many of the stringent requirements in semiconductor manufacturing.
- We purify the hydrazine using a simple process of passing the hydrazine through moisture absorbing inert media until high purity levels are obtained. Once the purity is established, we transfer the "dry" hydrazine into small vessels filled with an inert dried solvent material which are then packaged and shipped using standard IATA and DOT dangerous goods shipping practices. The purified hydrazine is trademarked as Brute ® Hydrazine.
- Hazardous waste will be collected and properly disposed of by a licensed third party company.

2. Facility Overview

- Build a factory with all the elements necessary for a standalone operation including hydrazine purification, shipping, and receiving capabilities, and dedicated spaces for quality assurance, inventory control, maintenance, utilities, information technology and communications. Standard facility accommodation such as offices, cubicle workstations, conference rooms, employee break rooms and bathrooms will be provided.
- External covered parking for up to 12 employees with small truck access to roll up door loading dock areas connected to the shipping and receiving area.
- External 4-hour fire rated storage structures for raw Hydrazine and hazardous wastes.
- External nitrogen storage tank, gas bottle storage and electrical pad.

3. Process Overview (see attached block diagram):

- Raw, unpurified hydrazine is delivered and stored within a pre-manufactured chemical storage building located adjacent to the main building. This storage building will be air conditioned, sprinklered, and exhausted using an abatement system designed to capture any unplanned release of hydrazine.
- The unpurified hydrazine is transferred via double walled stainless-steel piping to a vessel within a fume hood inside the Hydrazine Processing room. The transfer is conducted via a secondarily contained closed loop piping system.
- Hydrazine is drawn from this vessel into a series of heated columns containing aluminum oxide pellets and nitrogen gas to dry the hydrazine. The output of this process is nitrogen gas, water vapor, and purified hydrazine. The media used in the drying process is reused several times until it is no longer effective. Once ineffective, it is removed and placed into sealed containers and transferred to the hazardous waste container outside of the building to await waste pickup. A licensed, third part company will then remove, transport, and dispose of the waste.
- Raw, soap-like, inert "solvent" is delivered and stored in an inventory location within the main building. The solvent is then dried in a Solvent Processing room to remove all traces of moisture (*anhydrous solvent*). Nitrogen gas is used during the drying process with water vapor as the main contaminant in the vent stream. However, as low levels of hydrocarbons may also be present, carbon bed venting will be used to remove any contaminants.
- Small stainless-steel vessels of one to four liters are placed into an inventory location in the main building. Vessels are then transferred to the Solvent Processing room where they are filled with the anhydrous solvent. Solvent-filled vessels are then transferred to the Hydrazine Processing room where they are placed inside a pass-thru box located within a walk-in fume hood to await filling of the purified hydrazine.
- Stainless steel vessels pre-filled with anhydrous solvent are staged in a pass through cabinet, moved into the transfill cabinet, and connected to the manifolding network to receive the purified hydrazine.
- Once mixed with the solvent, the product is now called Brute® Hydrazine.

- The filled Brute® Hydrazine Vessel ("BHV") is then tested for purity and hydrazine contamination.
- After filled and tested, the BHV valves are closed, and metal stainless steel caps are placed on the ports of the vessel. The vessel is then ready to be placed in the transfill pass through for certification.
- Once certified to have less than 10 ppb hydrazine, the vessel is transported to the packaging and shipping process station.
- BHVs are packaged according to DOT hazardous materials transportation requirements where it is then delivered to customers.

4. The following chemicals and gases will be used on site:

- Purified Hydrazine (N_2H_4) – delivered from supplier
    i. Externally stored in a specialized pre-manufactured structure specifically designed to handle toxic, flammable, or hazardous chemicals. Maximum of 40 pounds = 4.77 gallons = 17.88 liters
    ii. Internally stored in a specialized cabinet specifically designed to handle gases and liquids. Maximum of 40 pounds = 4.77 gallons = 17.88 liters
    iii. Internally used within the Hydrazine Processing Room
    iv. NOTE: We plan to seek agency approval to increase internal and external storage capacity as production warrants.
- Brute® Hydrazine – produced on site
    i. Stored in specially designed transfer containers used for filling smaller vessels on site. Maximum of 1000 pounds = 119 gallons = 445 liters.
- Liquid Nitrogen (N_2) gas – delivered from local specialty gas company and stored externally in a bulk storage tank
    i. Tank size (TBD)
    ii. Piped to each required location by welded stainless-steel tubing
- Compressed Dry Air – produced on site
    i. Three (3) storage tanks (200 gallons per tank)
    ii. Piped to each required location
- Reverse Osmosis De-Ionized Water ("RODI") – produced on site
    i. One (1) storage tank (100 gallons)
- Isopropanol – standard concentration; available from suppliers
    i. < Ten (10 gallons)
- Acetone – standard concentration; available from suppliers
    i. < Two (2 gallons)
- Hydrogen gas – 100% concentration (pending)
    i. Two (2) cylinders
- Helium gas – 100% concentration
    i. Two (2) cylinders

5. Safety Design – the process is designed to prevent unplanned releases of any form of contaminants into the environment. The only emissions from the processes and the factory itself will be nitrogen gases with added H_2O (water vapor) that is captured during the drying processes of inert materials. Although the manufacturing process does not emit hazardous contaminants, the facility abatement systems are employed

as a precautionary measure to mitigate emissions of contaminants in the event of an unplanned release.

6. Facility Design – any area in which the potential for hydrazine to be released will have specific designs for multiple levels of containment.
   - Processing rooms will be designed with fire ratings greater than 2 hours
   - Rooms will be constantly vented to abatement systems
   - Walk in fume hoods will be located in rooms within hydrazine processing. These fume hoods will be constantly vented to abatement systems
   - Sealed glove boxes will be located within fume hoods and be vented to abatement systems.
   - Any room that has the potential for hydrazine release will have hydrazine detection monitors with connectivity to initiate shut down sequences and activate alarm systems
   - Supervisory Control and Data Acquisition ("SCADA") monitoring and control system will be installed as a supervisory mechanism.

7. Safety Training – extensive, periodic safety training is required and conducted annually and upon initial employment. All employees are required to participate in all safety-related training and full adherence to established procedures.

8. Abatement Systems – each controlled area will use high velocity exhaust systems that will continuously vent to an abatement system designed specifically for hydrazine capture. The abatement system we currently use is manufactured by CS Clean Solutions and is currently employed in our similar facility in Longmont, Colorado. All instances of hydrazine transfer, use or storage will be connected directly to an abatement system. All fume hood exhaust paths will also be connected to an abatement system in case of any unplanned release of hydrazine.

9. Hydrazine Detection – Detectors will be actively monitoring each step in the process to detect any unplanned release of hydrazine. Detectors are connected to the "SCADA system for real time monitoring and control of processes, storage and containment areas, processing glove boxes, fume hood, pass throughs, gas cabinets, and external storage and waste areas.

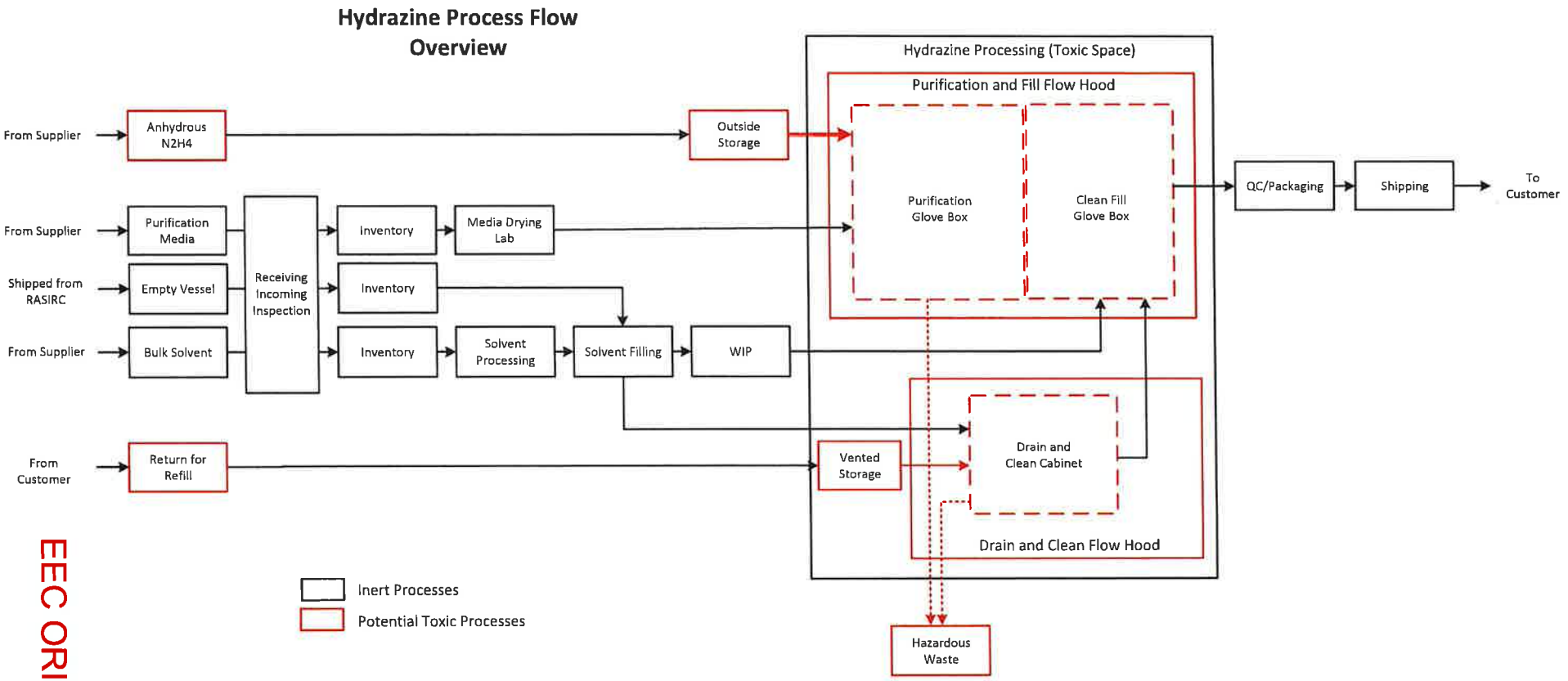
10. Emergency Response and Control – in the event of an unplanned release of hydrazine, processes will be shut down and isolated, alarms will be activated, and emergency response measures will be initiated. Emergency response measures include alarm activation (both visual and audible) and communications with employees throughout the building.

11. Fire Suppression – all storage and use areas will have fire detection and suppression systems installed. The water supply external to the building will have sufficient capacity and capability to extinguish any potential fire. Each storage and use area will have secondary containment designed to capture water that may be used in fire suppression to reduce the risk of environmental contamination. Intumescent paint will be used in all areas where the need for extended fire rating is desired. This paint will increase the fire rating of the spaces for up to 10 hours above normal.

12. Hazardous waste storage and containment – all hazardous waste will be removed from the main building and stored in an external chemical storage building.

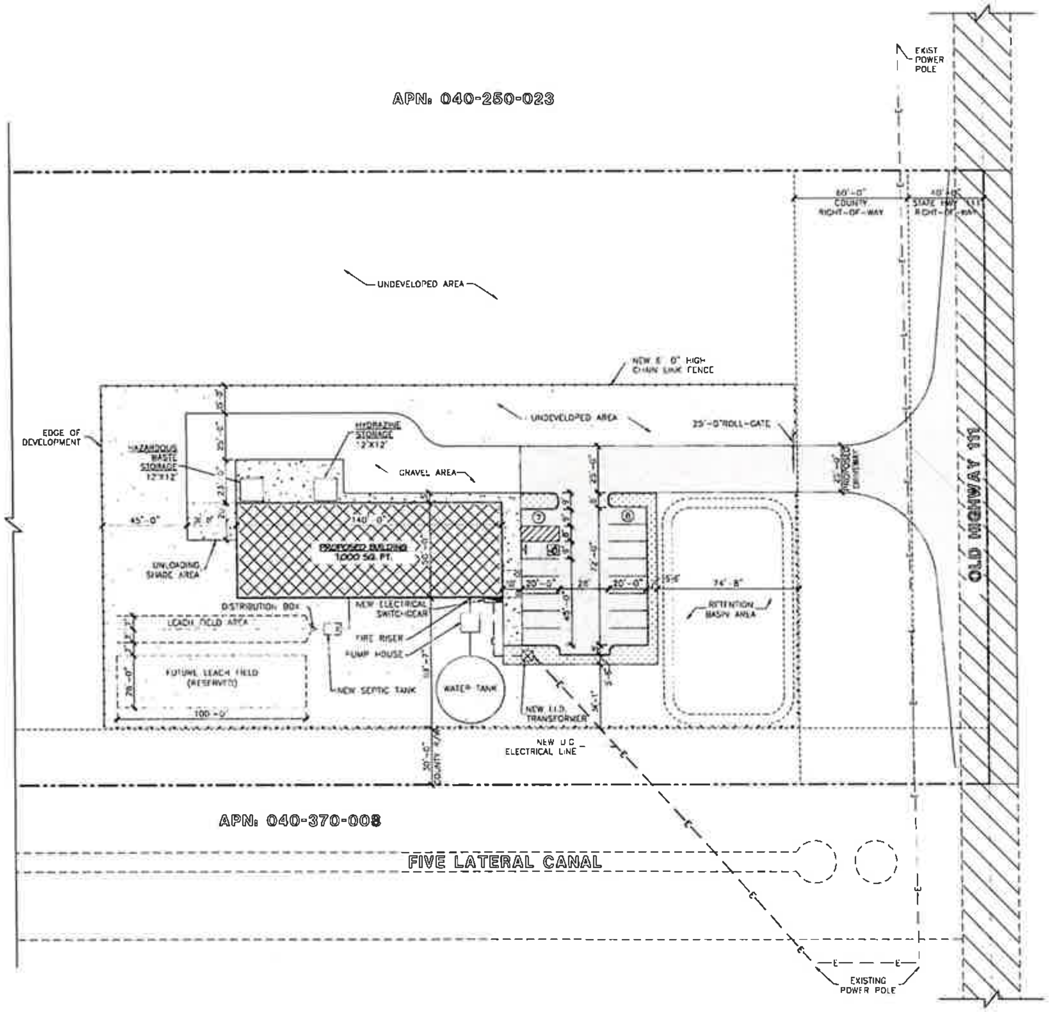
13. Regulatory compliance – all hazardous chemicals and waste will be properly controlled and identified according to requirements set forth by OSHA, GHS, Fire Code and any other applicable standards. All chemicals will be stored in approved chemical storage containers and storage lockers. Any storage areas of hydrazine shall have hydrazine detectors, fire suppression, secondary containment, and integrated emergency response monitoring and control.

14. Equipment and Utilities – Processing equipment consists of commonly available industrial components used in cleanroom operations. Primarily mechanical components used to distribute, control and regulate the flow of gases and liquids.
    - The is no usage of combustible materials used to operate any forms of machinery. All equipment will use supplied electrical power provided from the utility company and internally generated solar power systems.



HYDRAZINE FACILITY

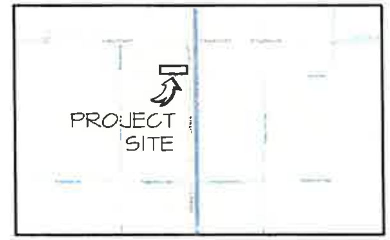
_ _ _ OLD HIGHWAY 111, IMPERIAL, CA. 92251



ENLARGED SITE PLAN

SCALE: 1"=30'-0"

PROPERTY BOUNDARY NOTE:
THE PROPERTY OR BOUNDARY LINES SHOWN ON THIS PLAN ARE AN APPROXIMATE AND ASSUMED LOCATION. THIS PLAN SHALL NOT BE USED AS A LEGAL DOCUMENT FOR LOCATING, ESTABLISHING OR DEPICTING PROPERTY LINES. IF PROPERTY LINES NEED TO BE ESTABLISHED OR IDENTIFIED, A REGISTERED LAND SURVEYOR WILL PREPARE THE NECESSARY SURVEY.



VICINITY MAP

NOT TO SCALE

PROJECT DATA

PROPERTY OWNER:
RASIRC
7815 SILVERTON AVE.
SAN DIEGO, CA 92126

PROPERTY ADDRESS:
OLD HIGHWAY 111
IMPERIAL, CA 92251

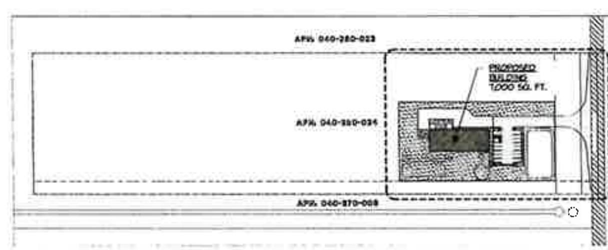
CONTRACTOR/DRAFTER:
DUGGINS CONSTRUCTION, INC
341 W. CHOWN COURT
IMPERIAL, CA 92251

HATCH LEGEND

- PAVED AREAS
- PROPOSED BUILDING
- CONCRETE AREAS
- LANDSCAPE AREAS
- UNDEVELOPED AREA
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- NEW 6' CHAIN-LINK FENCE
- EXIST. OVERHEAD ELECTRICAL LINE
- NEW ELECTRICAL LINE
- EXIST. POWER POLE

BUILDING DATA

ASSESSOR'S PARCEL No.	040-250-024
LEGAL DESCRIPTION	PAR 4 PM 802 OF TR 58 14 14 9.59 AC
ZONING	ML-2-RE
SITE AREA	9.59 ACRES (±417,740.00 SQ. FT.)
DEVELOPED AREA	72,285.38 SQ. FT.
EXISTING USE	VACANT
BUILDING USE	WAREHOUSE/OFFICE
TYPE OF CONSTRUCTION	V-B
PROPOSED BUILDING	7,000 SQ. FT.
HEIGHT:	19'-6"
STORIES	SINGLE STORY
PARKING REQUIRED	15 PARKING STALLS
PARKING PROVIDED	14 CUSTOMER REGULAR PARKING STALLS 1 ACCESSIBLE PARKING STALLS 15 TOTAL PARKING STALLS
LANDSCAPE REQUIRED	5% OF THE DEVELOPED AREA= 3,614.26 SQ. FT. 5% OF THE PARKING LOT= 254.07 SQ. FT. TOTAL LANDSCAPE REQUIRED = 3,868.33 SQ. FT.
LANDSCAPE PROVIDED	ON SITE = 1,365.96 SQ. FT. RETENTION BASIN= 6,291.42 SQ. FT. TOTAL LANDSCAPE PROVIDED= 7,657.38 SQ. FT.



OVERALL PLAN

N.T.S.

EEC ORIGINAL PKG

PROJECT:	HYDRAZINE FACILITY OLD HWY 111, IMPERIAL, CA. 92251
SCALE: AS SHOWN	DATE: 09/03/24
DRAWN BY:	M.G.
SHEET CONTENTS: SITE PLAN	JOB No. 2024-026
DRAWING No.	1 /1

DUGGINS CONSTRUCTION
PARTNERS IN DEVELOPMENT

341 WEST CROWN COURT, IMPERIAL, CA 92251
PHONE 760.355.5800 • FAX 760.355.6756
LIC. # 290804
www.dugginsconstruction.com

DISCLAIMER:

Emergency Response Action Plan (ERAP)
for
RASIRC Imperial Facility

Prepared by

J. Kevin Selby
Director – EHS
RASIRC, Inc.

11/5/2024

Table of Contents

1. Introduction

Purpose

This ERAP ("Plan") is designed to establish clear procedures for responding to emergencies, with a focus on hazardous materials, fire, and chemical containment, at the RASIRC facility in Imperial County, California. The Plan's objective is to ensure the safety of employees, responders, the public, and the environment.

Scope

The plan applies to all staff, contractors, and visitors at the RASIRC facility and addresses potential emergencies such as fires, chemical spills, natural disasters, and hydrazine releases.

2. Facility Overview

Location

The RASIRC Imperial facility is located at GPS coordinates 32.90959271996148, -115.51144045909557, near the city of Brawley. The RASIRC facility processes and purifies hydrazine, a hazardous material, which is stored and used in specialized containment areas with built-in fire protection and ventilation systems.

Emergency Contacts

Imperial County

Imperial County Fire Department and Office of Emergency Services
Address: 1078 Dogwood Rd., Heber, CA 92249
Phone: (442) 265-6000
Website: Imperial County Fire Department

Imperial County Sheriff's Office
Address: 328 Applestill Road, El Centro, CA 92243
Phone: (442) 265-2021
Website: Imperial County Fire Department

Imperial County Public Health Department
Address: 935 Broadway St., El Centro, CA 92243
Phone: (442) 265-1444
Website: ICPHD

Imperial County Behavioral Health Services
Address: 202 N. 8th Street, El Centro, CA 92243
Phone: (442) 265-1525
Crisis Line: (800) 817-5292
Website: Network of Care

Imperial County Emergency Medical Services (EMS) Agency
Address: 935 Broadway St., El Centro, CA 92243

Phone: (442) 265-1444
Website: ICPHD

211 Imperial
Service: Provides health, social, community, and disaster information and referrals.
Phone: Dial 2-1-1
Website: 211 San Diego

Center for Family Solutions
Service: Offers support for domestic violence and sexual assault victims.
Phone: (760) 353-8530
Website: Network of Care

Sure Helpline Crisis Center
Service: Provides crisis intervention and support services.
24-Hour Hotline: (760) 352-7873
Rape Hotline: (760) 352-7273
Website: Network of Care

Child Protective Services
Phone: (760) 337-7720
Website: Network of Care

Pioneers Memorial Healthcare District
Address: 207 W. Legion Rd., Brawley, CA 92227
Phone: (760) 351-3333
Website: https://pmhd.org/.

El Centro Regional Medical Center
Address: 1415 Ross Ave., El Centro, CA 92243
Phone: (760) 339-7100
Website: https://www.ecrmc.org/

For immediate emergencies, always dial **911**.

RASIRC

Name	Title	Plan Role	Telephone	E-Mail
Jeff Spiegelman	CEO, Founder	Crisis Commander		js@rasirc.com
J. Kevin Selby	Director – EHS	Incident Commander	858-902-9258	kselby@rasirc.com
Kurt Christian	Director – Construction	Incident Commander (back up)	719-287-5878	kchristian@rasirc.com

3. Risk Assessment and Emergency Identification

Potential Hazards

Fire: Risk from storage areas, process equipment, and electrical systems.

Chemical Spill/Release: Main risk from hydrazine and nitrogen gas.

Natural Disasters: Potential earthquakes and power outages in the region.

Hazardous Material Inventory: The following chemicals and their anticipated volumes are present on-site.

Chemical	Storage (external)	Usage (internal)
Nitrogen	3000 lbs.	
Hydrazine	20 liters	3 liters
Isopropanol	-----	20 liters
Hazardous Waste (solid)	20 lbs.	5 lbs.

See attached site layout (Appendix A) and facility maps (Appendix B) for storage/usage locations.

4. Emergency Procedures

Evacuation Plan

To ensure a safe and organized evacuation at the RASIRC facility, designated evacuation routes, assembly points, and procedures for accounting for personnel post-evacuation will be implemented:

Evacuation Routes

Primary Evacuation Routes: Clearly marked routes leading from work areas, storage rooms, and offices to exits. These routes should avoid hazardous material storage areas, including hydrazine and nitrogen storage, to minimize exposure risks.

Secondary Evacuation Routes: Alternate paths in case primary routes are blocked or unsafe. Secondary routes should be accessible from all facility areas and marked with visible exit signs.

Maps and Signage: Evacuation maps are posted throughout the facility, with color-coded arrows showing primary and secondary routes. Maps will be updated regularly to reflect any changes in facility layout.

Muster Points

Primary Muster Point: Designated in an open area a safe distance from the facility, downwind from hazardous material storage zones to minimize exposure in case of leaks. This area should have sufficient space to accommodate all facility personnel and visitors.

Alternate Muster Point: In case the primary location is compromised, an alternate assembly area is designated in a secure location at the opposite side of the facility grounds.

Signage: Assembly points are marked with visible signs, and all personnel are informed of these locations during new hire orientation and periodic safety briefings.

Post-Evacuation Personnel Accounting Steps

Emergency Coordinator: An Emergency Coordinator will be appointed for the RASIRC Imperial facility. In the event the Emergency Coordinator is not on-site, any Evacuation Warden is authorized to serve as the Emergency Coordinator.

Evacuation Wardens: Evacuation wardens are appointed for each facility section. Wardens will guide personnel during evacuation, ensure all areas are cleared, and report headcounts.

Headcount Procedure: Wardens conduct a headcount at muster points, cross-referencing against sign-in sheets or attendance records for employees, contractors, and visitors.

Visitor and Contractor Tracking: All visitors and contractors are required to sign in and out of the facility. This log is checked post-evacuation to confirm that all non-staff personnel are accounted for.

Reporting to Emergency Coordinator: Each warden reports their headcount and any missing individuals to the Emergency Coordinator, who compiles a final report and communicates it to emergency response teams if needed.

This structured approach ensures that all personnel are safely evacuated, accounted for, and kept at a safe distance from potential hazards, enabling a coordinated and efficient response during an emergency.

Fire Response

Throughout the facility, fire alarm and sprinkler systems are installed, with specialized firefighting equipment maintained near hydrazine storage areas.

Staff are instructed to prioritize evacuation unless a fire can be safely managed with available fire extinguishers.

Chemical Spill/Release

Hydrazine Containment: Hydrazine transfers are conducted in secondarily contained closed-loop systems with SCADA-linked detection monitors installed to initiate immediate process shutdown and alarm systems in case of leak detection.

Spill Cleanup: Procedures involve secondary containment measures, use of absorbent materials, and protective gear.

Medical Emergencies

Emergency showers, eye wash stations, and first aid kits are available to the site workforce.

Staff are trained in CPR/first aid/AED for general first aid, chemical exposure, and hydrazine exposure.

5. Communication and Coordination

Internal Alerts: The facility's fire/smoke detection system uses lights and alarms to inform staff of emergencies.

External Notifications: The RASIRC facility has established procedures for alerting external fire, hazmat, and medical services promptly in the event of an emergency. The notification includes the nature of the emergency and involved chemicals.

Incident Command System (ICS): The RASIRC emergency response program is based upon the structure established by the Federal Emergency Management Agency (FEMA) and the National Incident Management System (NIMS).

6. Training and Drills

Employee Training: Regular training on ERAP, spill response, and fire evacuation procedures are provided to all facility employees.

Emergency Drills: Drills are conducted annually for fire evacuation, spill response, and natural disaster preparedness, with records of each drill and debrief sessions for continuous improvement. Drills are also conducted with the implementation of new chemical introductions, facility modifications, or significant process changes.

7. Personal Protective Equipment (PPE) and Equipment Maintenance

PPE Requirements: Specific PPE, including respiratory protection, gloves, and fire-resistant clothing, are provided for each employee for each emergency type.

Equipment Maintenance: Regular inspection of fire extinguishers (monthly), alarm systems (quarterly), SCADA (quarterly), and all protective equipment (each time of use) are conducted to ensure the equipment is adequately maintained and ready for use.

8. Post-Incident Review

Incident Reporting: All emergencies, including causes and corrective actions, are documented and maintained by the RASIRC EHS organization.

Debrief and Cleanup: Post-incident de-briefs are conducted to ensure safe cleanup, waste disposal, regulatory reporting compliance, and continuous improvement. De-brief records and other documentation are maintained by the RASIRC EHS organization.

9. Recordkeeping

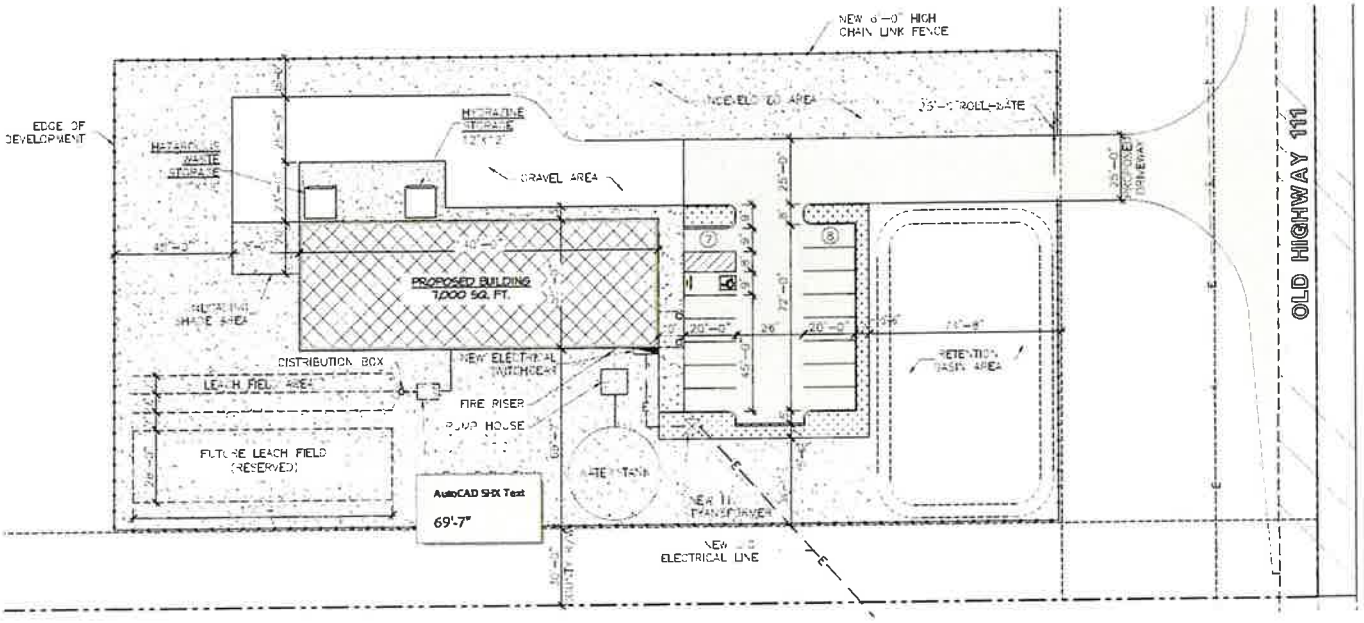
Document Control: The RASIRC EHS organization maintains relevant ERAP records, including training logs, drill records, and equipment inspections to ensure regulatory compliance.

10. Regulatory Compliance and Continuous Improvement

Regular updates and reviews of the ERAP are conducted with Imperial County Fire Department representatives to ensure continued compliance with local regulations and best practices.

This ERAP ensures that RASIRC is prepared for potential emergencies, supporting regulatory compliance and prioritizing the safety of staff and the local community.

Appendix A – Site Map



EEC ORIGINAL PKG

Appendix B – Facility Map

EEC ORIGINAL PKG

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US - OSHA Hazard Communication Standard (29 CFR 1910.1200)

Issuing Date 16-Nov-2017 **Revision Date** 30-Aug-2022

1. Identification

Product identifier

Product Name Brute Hydrazine

Other means of identification

Product Code(s) 110166

UN/ID no UN2029

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Semiconductor Industry Use

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address
RASIRC
7815 Silverton Ave.
San Diego, CA 92126
TEL: (858)-259-1220

Emergency telephone number

Emergency telephone 24-hour Emergency Phone: Infotrac 1-800-535-5053 (USA & Canada), 1-352-323-3500 (International)

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1B
Flammable liquids	Category 3

Hazards not otherwise classified (HNOC)

Not applicable.

Label elements

Danger

Hazard statements
Toxic if swallowed.
Toxic in contact with skin.
Harmful if inhaled.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause cancer.
Flammable liquid and vapor.

Precautionary Statements - Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/clothing and eye/face protection.
Wash face, hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Do not breathe dusts or mists.
Contaminated work clothing must not be allowed out of the workplace.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container closed.
Ground and bond container and receiving equipment.
Use only non-sparking tools.
Take action to prevent static discharges.
Use explosion-proof electrical/ ventilating/ lighting/ equipment.

Precautionary Statements - Response
Immediately call a doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a doctor.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Immediately call a doctor.
IF SWALLOWED: Immediately call a doctor.
Rinse mouth.
Do NOT induce vomiting.
In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish.

Precautionary Statements - Storage
Store locked up.
Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

Other information

Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Trade secret
Hydrazine	302-01-2	50 - 65	*
Organic Proprietary Solvent	Trade secret	35 - 50	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

For more information on the proprietary organic solvent refer to RASIRC Document Number 900766, Question 5 in the BRUTE Hydrazine Safety FAQ.

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. IF exposed or concerned: Get medical advice/attention.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical attention. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical attention. May cause an allergic skin reaction.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation. Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause sensitization in susceptible persons. Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Product is or contains a sensitizer. May cause sensitization by skin contact.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge Yes.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Attention! Corrosive material.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Use non-sparking tools.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat,

hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Store locked up. Protect from moisture. Store away from other materials. Acids such as hydrochloric, sulfuric, and nitric, and oxidizers like hypochlorites, hydrogen peroxide, permanganates, chromates etc. should be avoided in areas where hydrazine is handled or stored.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Hydrazine 302-01-2	TWA: 0.01 ppm S*	TWA: 1 ppm TWA: 1.3 mg/m^3 (vacated) TWA: 0.1 ppm (vacated) TWA: 0.1 mg/m^3 (vacated) S* S*	IDLH: 50 ppm Ceiling: 0.03 ppm 2 hr Ceiling: 0.04 mg/m^3 2 hr

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles. Face protection shield.

Hand protection

Wear suitable gloves. Impervious gloves.

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	
Physical state	Liquid
Color	Colorless
Odor	Ammonia, Amine
Odor threshold	No data available

Property	**Values**	**Remarks • Method**
pH	16.3	
Melting point / freezing point	-25.0 °C / -13 °F	
Initial boiling point and boiling range	116.2 °C / 241.2 °F	ASTM D2879
Flash point	46.7 °C / 116.1 °F	ASTM E1232
Evaporation rate		No data available
Flammability		Flammable liquid
Flammability Limit in Air		
Upper flammability or explosive limits	51.0% @ 125°C	Estimated using Le Chatelier's Principle; ASTM E681
Lower flammability or explosive limits	3.3 % @ 125°C	ASTM E681
Vapor pressure	14 Torr @ 20.0°C	ASTM D2879
Vapor density	1.1	(air = 1)
Relative density	1.05 @ 20.0 °C (68.0 °F)	
Water solubility	Miscible in water	
Solubility(ies)		Not applicable
Partition coefficient		Not determined
Autoignition temperature	217.0 °C / 422.6 °F	ASTM E659
Decomposition temperature	150.3 °C / 302.5 °F	on passivated 316 Stainless Steel; ARC method
Kinematic viscosity		Not determined
Dynamic viscosity		Not determined

Other information

Explosive properties	At 46.7°C explosive mixtures may be formed
Oxidizing properties	Not applicable
Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Liquid Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity None under normal use conditions.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions Hydrazine and water form an azeotropic mixture which boils at 120.3°C (760 mm Hg) containing 58.5 mole % hydrazine. Reacts readily and exothermically with most oxidizing agents, and mineral acids. The intensity of the reactions of hydrazine with oxidizers or acids is dependent upon the concentration of the reactants. The lower the hydrazine concentration, the milder the reaction.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Heat, flames and sparks. Exposure to air or moisture over prolonged periods.

Incompatible materials Strong oxidizing agents. Calcium oxides. Chlorine. Fluorine. Oxygen. Copper. Zinc. Alkali metals. Chromates. Mineral acids.

Hazardous decomposition products Nitrogen oxides (NOx).

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Toxic in contact with skin.

Ingestion Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing. Itching. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral)	92.30 mg/kg
ATEmix (dermal)	461.50 mg/kg
ATEmix (inhalation-dust/mist)	1.0708 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrazine 302-01-2	= 60 mg/kg (Rat)	= 91 mg/kg (Rabbit)	= 0.75 mg/L (Rat) 4 h
Organic Proprietary Solvent	= 17 g/kg (Rat)	> 20 mL/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye damage. Causes burns.

Respiratory or skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Hydrazine 302-01-2	A3	Group 2A	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 2A - Probably Carcinogenic to Humans
NTP (National Toxicology Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects Liver. Kidney. Respiratory system. Eyes. Skin. Central nervous system. Blood. Lungs.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrazine 302-01-2	EC50: =0.071mg/L (72h, Pseudokirchneriella subcapitata) EC50: =0.006mg/L (72h, Pseudokirchneriella subcapitata) EC50: =0.02mg/L (96h,	LC50: 0.7 - 1.3mg/L (96h, Lepomis macrochirus) LC50: 0.54 - 1.31mg/L (96h, Lepomis macrochirus) LC50: =1.17mg/L (96h,	-	-

	Pseudokirchneriella subcapitata)	Lepomis macrochirus) LC50: 1.81 - 2.79mg/L (96h, Pimephales promelas) LC50: 0.28 - 1.34mg/L (96h, Poecilia reticulata)		
Organic Proprietary Solvent	-	LC50: 56200 - 63700mg/L (96h, Pimephales promelas) LC50: =10000mg/L (96h, Lepomis macrochirus) LC50: =61000mg/L (96h, Lepomis macrochirus)	-	EC50: =42426mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Hydrazine 302-01-2	-0.16
Organic Proprietary Solvent	-1.98

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

14. Transport information

DOT

UN/ID no	UN2029
Proper shipping name	HYDRAZINE, ANHYDROUS
Transport hazard class(es)	8
Subsidiary class	3, 6.1
Packing group	I
Reportable Quantity (RQ)	(Hydrazine: RQ (kg)= 0.454) Hydrazine: RQ (lb)= 1
Reportable quantity kg (calculated)	Hydrazine: RQ (kg)= 1
Reportable quantity lbs. (calculated)	Hydrazine: RQ (lb)= 2
Special Provisions	A7, A10, B7, B16, B53
DOT Marine Pollutant	I
Marine pollutant	Hydrazine
Description	UN2029, HYDRAZINE, ANHYDROUS, 8 (3, 6.1), I, Marine pollutant
Emergency Response Guide	132

Number

IATA

UN number or ID number	UN2029
UN proper shipping name	Hydrazine, anhydrous
Transport hazard class(es)	8
Subsidiary hazard class	3, 6.1
Packing group	I
Description	UN2029, Hydrazine, anhydrous, 8 (3, 6.1), I
ERG Code	8FP

IMDG

UN number or ID number	UN2029
UN proper shipping name	HYDRAZINE, ANHYDROUS
Transport hazard class(es)	8
Subsidiary hazard class	3, 6.1
Packing group	I
EmS-No	F-E, S-C
Marine pollutant	P
Description	UN2029, HYDRAZINE, ANHYDROUS, 8 (3, 6.1), I, (46.7°C C.C.), Marine pollutant

15. Regulatory information

International Inventories

Contact supplier for inventory compliance status

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Hydrazine - 302-01-2	0.1

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Hydrazine 302-01-2	1 lb	1 lb	RQ 1 lb final RQ RQ 0.454 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Hydrazine - 302-01-2	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Hydrazine 302-01-2	X	X	X
Organic Proprietary Solvent	-	-	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA **Health hazards** 3 **Flammability** 2 **Instability** 1 **Special hazards** -

HMIS **Health hazards** 3 * **Flammability** 2 **Physical hazards** 1 **Personal protection** X

Chronic Hazard Star Legend * = Chronic Health Hazard

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend **Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Issuing Date 16-Nov-2017

Revision Date 30-Aug-2022

Revision Note Updated format. Change to classification.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Lonza

SAFETY DATA SHEET

according to US Regulation 29 CFR 1910.1200 and the Canadian HPA

ULTRA PURE™ HYDRAZINE 5F

Version 1.2 | Revision Date 2020.05.11 | Print Date 2020.06.24

SECTION 1. IDENTIFICATION

Product name : ULTRA PURE™ HYDRAZINE 5F

Manufacturer or supplier's details

Company : Arch Chemicals, Inc.
1400 Bluegrass Lakes Parkway
Alpharetta, GA
30004
United States of America (USA)

Telephone : +1 770 521-5999
Telefax : +1 770 521-5950
E-mail address : sds-info@lonza.com

Emergency telephone number : For incidents only (spill, leak, fire, exposure, or accident), call CHEMTREC at
1-800-424-9300 (inside North America) [CCN 864796]
1-703-741-5970 (outside North America) [CCN 864796]

+41 61 313 94 94 (24h)

Recommended use of the chemical and restrictions on use

Recommended use : Aerospace fuel component.

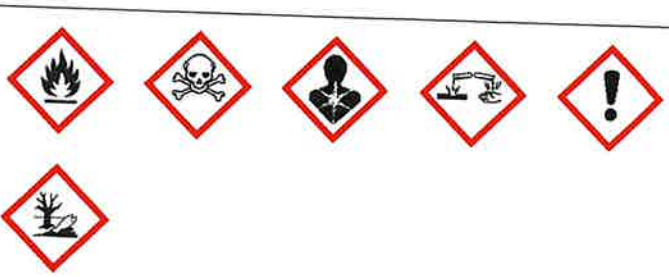
SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids	: Category 3
Acute toxicity (Oral)	: Category 3
Acute toxicity (Inhalation)	: Category 2
Acute toxicity (Dermal)	: Category 2
Skin corrosion	: Category 1B
Serious eye damage	: Category 1
Skin sensitisation	: Sub-category 1B
Carcinogenicity	: Category 1B
Short-term (acute) aquatic hazard	: Category 1
Long-term (chronic) aquatic hazard	: Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements :
H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H310 + H330 Fatal in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H350 May cause cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements :

Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P262 Do not get in eyes, on skin, or on clothing.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P284 Wear respiratory protection.
Response:
P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/

attention.
P361 + P364 Take off immediately all contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P391 Collect spillage.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
Disposal:
P501 Dispose of contents/container in accordance with local regulation.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Hydrazine

Hazardous components

Chemical name / Synonyms	CAS-No.	Concentration (% w/w)
Hydrazine	302-01-2	90 - 100

SECTION 4. FIRST AID MEASURES

If inhaled : Remove to fresh air.
Seek medical attention if breathing becomes difficult or if respiratory irritation develops.
If not breathing, give artificial respiration.
Call for medical assistance.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.
Wash contaminated clothing before re-use.
Consult a physician.

In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.
Seek medical attention immediately.

If swallowed : DO NOT induce vomiting or give anything by mouth to an unconscious or convulsing person.
Call a physician immediately.

Most important symptoms and effects, both acute and delayed : None known.

Notes to physician : Pyridoxine (Vitamin B6) has been used successfully to treat the neurological symptoms of hydrazine exposure.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use alcohol foam, carbon dioxide, dry chemical or water spray when fighting fires.
Specific hazards during firefighting	:	Material may be ignited if preheated to temperatures above the flash point in the presence of a source of ignition. Can form explosive mixtures at temperatures at or above the flash point.
Further information	:	In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus. Response to this material requires the use of a full encapsulated suit and full-face (NIOSH approved) self-contained breathing apparatus (SCBA). Use water to cool containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Response to this material requires the use of a full encapsulated suit and full-face (NIOSH approved) self-contained breathing apparatus (SCBA).
Environmental precautions	:	Remove all sources of ignition. If this material is released into a work area, evacuate the area immediately. Hazardous concentrations in air may be found in local spill area and immediately downwind. Utilize emergency response personal protection equipment prior to the start of any response. Stop source of spill as soon as possible and notify appropriate personnel. This material may be neutralized for disposal; you are requested to contact Arch Chemicals at 1-800-654-6911 before beginning any such procedure. Decontaminate all clothing and the spill area using a detergent and flush with large amounts of water.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Avoid contact with material, avoid breathing vapors, use only in a well ventilated area, use bonding and grounding when transferring quantities of material. Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water.
Conditions for safe storage	:	Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed. Avoid direct exposure to sunlight or ultraviolet (UV) light sources.

Keep under a nitrogen blanket.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Hydrazine	302-01-2	TWA	0.01 ppm	ACGIH
		Ceil_Time	0.03 ppm 0.04 mg/m3	NIOSH/GUIDE

Engineering measures : Use only in area provided with appropriate exhaust ventilation.
Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Respiratory protection : Wear a NIOSH approved respirator if any exposure occurs.

Filter type : NIOSH approved full-face positive pressure supplied-air respirator

Eye protection : Goggles
Face-shield

Skin and body protection : Gloves
Boots
Apron
Wear the following impervious coverall material:
butyl-rubber
Neoprene
Nitrile rubber

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : colourless

Odour : Ammonia

Odour Threshold : no data available

pH : 10.1 - 10.7 (77 °F / 25 °C)
Concentration: 10 g/l

Melting point/range : 34.7 °F / 1.5 °C

Boiling point/boiling range	:	236.3 °F / 113.5 °C
Flash point	:	126 °F / 52 °C Method: DIN 51376
Evaporation rate	:	no data available
Flammability (solid, gas)	:	Flammable
Flammability (liquids)	:	no data available
Upper explosion limit	:	100 %(V)
Lower explosion limit	:	4.7 %(V)
Vapour pressure	:	19.817 hPa (77 °F / 25 °C)
Relative vapour density	:	1.1
Relative density	:	1.004
Density	:	1.004 g/cm3
Water solubility	:	completely miscible
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	518 °F / 270 °C Method: Test Method: US Bureau of Mines Bulletin 627:
Decomposition temperature	:	518 °F / 270 °C
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	no data available
Oxidizing properties	:	no data available
Molecular weight	:	32.04 g/mol

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	:	Do not expose to temperatures above: 51 °C Temperatures above the flash point in combination with sparks, open flames, or other sources of ignition. Contact with incompatible substances
Incompatible materials	:	Strong oxidizing agents Peroxides nitrogen tetroxide fuming nitric acid fluorine, halogen fluorides metal oxides such as those of iron, copper, lead, manganese, and molybdenum Package only in Teflon® high density polyethylene or 304L or

347 stainless steels containing less than 0.5% molybdenum.

Hazardous decomposition products : Ammonia
Hydrogen

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, skin, eyes, ingestion

Acute toxicity

Acute oral toxicity : LD50 (Rat): 60 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.747 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): 91 mg/kg

Skin corrosion/irritation

Result: Corrosive to skin

Serious eye damage/eye irritation

Result: Corrosive to eyes

Respiratory or skin sensitisation

Test Type: Patch Test 24 Hrs.
Species: Humans
Result: May cause sensitisation by skin contact.

Carcinogenicity

IARC

Group 2A: Probably carcinogenic to humans
Hydrazine 302-01-2

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

Anticipated carcinogen.
Hydrazine 302-01-2

ACGIH

Confirmed animal carcinogen with unknown relevance to humans
Hydrazine 302-01-2

Repeated dose toxicity

Target Organs: Liver, Kidney, Central nervous system, Lungs

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 5.98 mg/l Exposure time: 96 h Analytical monitoring: yes Method: OECD Test Guideline 203 GLP: no
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia pulex (Water flea)): 0.175 mg/l Exposure time: 48 h Test Type: Immobilization Method: EPA-660/3-75-009
Toxicity to microorganisms	:	EC10 (Pseudomonas putida): 0.019 mg/l Exposure time: 16 h Test Type: Growth inhibition

Persistence and degradability

Biodegradability : Remarks: Not applicable

Bioaccumulative potential

Components:

Hydrazine:

Partition coefficient: n-octanol/water : log Pow: -1.37

Mobility in soil

no data available

Other adverse effects

Ozone-Depletion Potential : Regulation: US. EPA Clean Air Act (CAA) Section 602 Ozone-Depleting Substances (40 CFR 82, Subpt. A, App A & B)
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : If this product becomes a waste, it will be a hazardous waste. As a hazardous liquid waste it must be disposed of in accordance with local, state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

DOT

UN number	: 2029
Proper shipping name	: Hydrazine, anhydrous
Transport hazard class	: 8
Packing group	: I
Labels	: 8 (3, 6.1)
Emergency Response Guidebook Number	: 132
Environmental hazards	: yes

TDG

UN number	: 2029
Proper shipping name	: HYDRAZINE, ANHYDROUS
Transport hazard class	: 8
Packing group	: I
Labels	: 8 (3, 6.1)
Environmental hazards	: yes

IATA

UN number	: 2029
Proper shipping name	: Hydrazine, anhydrous
Transport hazard class	: 8
Packing group	: I
Labels	: 8 (3, 6.1)

IATA Passenger

UN number	: 2029
Transport hazard class	: 8
Environmental hazards	Not permitted for transport
	: no

IMDG

UN number	: 2029
Proper shipping name	: Hydrazine, anhydrous
Transport hazard class	: 8
Packing group	: I
Labels	: 8 (3, 6.1)
EmS Number 1	: F-E
EmS Number 2	: S-C
Environmental hazards	: Marine pollutant: yes

ADR

UN number	: 2029
Transport hazard class	: 8
Environmental hazards	Not permitted for transport
	: yes

RID

UN number	: 2029
Transport hazard class	: 8
	Not permitted for transport
Environmental hazards	: yes
Special precautions for user	: none
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	: Not applicable

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Hydrazine	302-01-2	1	1

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Hydrazine	302-01-2	1	1

SARA 311/312 Hazards

See above: SECTION 2. Hazard Identification-GHS Classification

SARA 313

Components	CAS-No.	Concentration
Hydrazine	302-01-2	>= 90 - <= 100 %

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

Components	CAS-No.	Concentration
Hydrazine	302-01-2	>= 90 - <= 100 %

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

Components	CAS-No.	Concentration
Hydrazine	302-01-2	>= 90 - <= 100 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

Clean Water Act

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

Components	CAS-No.
Hydrazine	302-01-2

Pennsylvania Right To Know

Components	CAS-No.
Hydrazine	302-01-2

California Prop. 65

WARNING **Cancer - www.P65Warnings.ca.gov.**

Components	CAS-No.
Hydrazine	302-01-2

Canadian lists

NPRI

Components	CAS-No.
Hydrazine	302-01-2

The components of this product are reported in the following inventories:

TSCA : The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

TSCA : The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH : US. ACGIH Threshold Limit Values
NIOSH/GUIDE : US. NIOSH: Pocket Guide to Chemical Hazards, as amended

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

2
Arch is a wholly-owned subsidiary of Lonza and continues to operate as Arch Chemicals, Inc.
Revision Date : 2020.05.11

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Date format : yyyy/mm/dd

US / EN

ATTACHMENT "H" – HEALTH RISK ASSESSMENT

Health Risk Assessment Report

RASIRC Imperial Facility

Imperial County, California

Health Risk Assessment Report

prepared by

J. Kevin Selby
Director of Environmental, Health, and Safety, RASIRC

Dispersion Modeling (AERSCREEN) provided by All4 Consulting

May 29, 2025

Table of Contents

1. Executive Summary

The purpose of this Health Risk Assessment (HRA) is to evaluate potential health risks associated with emissions from the RASIRC Imperial facility located in Imperial County, California. This assessment incorporates guidance from the 2015 Air Toxics Hot Spots Program Guidance Manual by the Office of Environmental Health Hazard Assessment (OEHHA) (OEHHA, 2015) and aligns with updates provided by the Imperial County Air Pollution Control District (ICAPCD) (ICAPCD, 2025). The study considers fugitive emissions from facility operations, AERSCREEN dispersion modeling, exposure assessment, and risk characterization for both cancer and non-cancer health effects.

2. Facility Information

Facility Name: RASIRC Imperial Facility
Facility Address: 32.90959271996148, -115.51144045909557 (GPS coordinates)
Facility Operator: RASIRC, Inc.
County: Imperial County, California
Air District: Imperial County Air Pollution Control District (ICAPCD) (ICAPCD, 2025)

2.1 Facility Overview & Emissions Process

Facility Description: 7,000 ft^2, closed loop chemical purification process with continuously ventilated abatement control technologies.
Emission Controls: CLEANSORB® abatement system (99.5% efficiency)
Basin: Mesquite Lake
Land Use: Rural, with nearby agricultural fields and sensitive receptors (schools, hospital, residential areas)
Operating Hours: 8 hour shifts, 5 days per week, 52 weeks in year (2,080 hours per year)

Area Description: The RASIRC Imperial facility is located approximately four miles southeast of Brawley. The area is characterized by flat desert terrain and is primarily used for agricultural purposes, with numerous irrigation canals supporting crop cultivation. The climate is arid, featuring hot summers and mild winters. The region is sparsely populated, with residential areas and sensitive receptors such as schools and hospitals concentrated in nearby towns like Brawley. The Imperial County Airport is located approximately ten miles to the south and provides regional air services. The Salton Sea, a significant inland saline lake, lies about 20 miles to the northwest. The area's economy is largely driven by agriculture, supported by the Imperial Valley's irrigation infrastructure.

Process Description: The facility reduces the water content commonly present in raw hydrazine through a highly controlled closed-loop system that is equipped with an ventilation abatement system to mitigate unplanned or fugitive emissions. The resulting anhydrous hydrazine (~ 1 liter) is then transferred into small vessels containing an inert solvent before being packaged and shipped globally to semiconductor manufacturing companies.

2.2 Surrounding Land Use and Sensitive Receptors

Physical structures in the immediate vicinity include the moderately used Old Highway 111, a small solar farm, and two abandoned electric power plants located approximately 1 mile south of the facility.

Critical Receptors

Name	Type of Establishment	Address	Latitude	Longitude	Distance from RASIRC Facility	Exposure Risk Level
Brawley Residential Neighborhoods	Residential Area	Brawley, CA	32.9781	-115.5306	~4 miles NW	Low
Brawley Union High School	School	480 N Imperial Ave, Brawley, CA 92227	32.9788	-115.5253	~5 miles NNW	Low
Miguel Hidalgo Elementary School	School	615 Cesar Chavez St, Brawley, CA 92227	32.9765	-115.5278	~4 miles NNW	Low
Pioneers Memorial Healthcare	Hospital	207 W Legion Rd, Brawley, CA 92227	32.9772	-115.5302	~4 miles NW	Low

Table 1

3. Emissions Inventory

3.1 Pollutants of Concern

The RASIRC Air Quality Analysis identified the following emissions from facility operations:

- Nitrogen Gas (N_2) – CAS 7727-37-9: The predominant emission from the facility's closed-loop process, with both controlled and potentially uncontrolled emission scenarios.
- Water Vapor: Water vapor is emitted alongside nitrogen gas during routine operations.
- Trace Hydrocarbons: Although emitted in small amounts, these emissions are captured and treated by the CLEANSORB® abatement system. The system chemically converts hazardous process gases into stable salts at ambient temperatures. The abatement system has an effective emissions output of <0.1 ppm.
- Purified Hydrazine (N_2H_4) – CAS 302.01-2: Potentially emitted in trace amounts during storage and transfer processes, with rigorous monitoring and closed-loop systems to control and contain any release.
- Other Pollutants: Any additional emissions identified during operation, such as byproducts or contaminants associated with the purification process.

Of these, only hydrazine (N_2H_4) is classified as a Toxic Air Contaminant (TAC) by the California Air Resources Board (CARB) (CARB, 1996) and the Office of Environmental Health Hazard Assessment (OEHHA). The RASIRC Imperial Health Risk Assessment (HRA) will be based upon the data produced by the OEHHA toxicological evaluations. (see Table 5)

3.2 Source Characterization

Introduction

This section presents estimated fugitive emissions rates for the RASIRC Imperial facility, based on California Air Resources Board (CARB) emission factors and U.S. EPA methodologies for fugitive emissions from valves, flanges, pumps, storage, and transfer operations. Given that the RASIRC Imperial Operations process involves a closed-loop system with continuous ventilated abatement system (CLEANSORB, 99.5% efficiency), these calculations focus on potential fugitive losses before and after abatement.

Emission Sources

Potential emission sources from the facility include:

Fugitive Emissions: Small leaks from valves, flanges, pumps, and seals during process operation. Calculated using CARB California Air Toxics Emission Factors (CATEF) and adjusted for actual equipment counts.

Storage Losses: Vapor displacement losses due to daily temperature and pressure fluctuations in fixed-roof hydrazine storage tanks. Calculated using U.S. EPA AP-42 Chapter 7.1 methodology. Occur continuously regardless of process operation.

Transfer Emissions: Vapor losses during active hydrazine transfers between storage and process systems. Adjusted for actual operating hours, consistent with process activity.

Emission Estimation Methodology

Emission calculations were based on:

Fugitive Source Quantification: Quantity of valves, flanges, pumps, seals used in the Operations process and associated chemical transfer configuration (RASIRC Imperial Piping and Instrumentation Diagram (P&ID))

Fugitive Component Emissions: Estimated using California Air Resources Board (CARB) Air Toxics Emission Factor (CATEF) Database (CARB, 1996).

Storage Losses: Storage losses were estimated using AP-42 Chapter 7, "Liquid Storage Tanks" methodology, specifically accounting for breathing losses due to daily temperature fluctuations and vapor expansion within the storage vessels.

These losses are assumed to occur continuously throughout the year, independent of the facility's daily operating schedule, because vapor displacement can occur even when the system is idle. Therefore, the calculated storage loss value of 1.848 kg/year was not adjusted for the facility's operating hours (2,080 hrs/year).

In contrast, working losses and transfer emissions, which are directly related to active material movement and equipment use, were adjusted to reflect the actual operating schedule.

Transfer Emissions: Derived from South Coast Air Quality Management District (SCAQMD) guidelines (SCAQMD, 2023).

Abatement Efficiency: A 99.5% reduction in pollutant emissions (CLEANSORB manufacturer's abatement efficiency specification).

Fugitive Source Quantification

Parameter*	P & ID Process Step	Quantity
Valves	Purification Fill and Test	12
	Circulation Station 1	10
	Circulation Station 2	10
	Conditioning Station	10
	N2 Source	6
	Purification Antechamber	8
	Fill and Test Antechamber	8
	FTIR Purification	9
	Halo LP	7
	FTIR Fill and Test	6
	Vacuum Pump	5
	Gas Phase Conditioning Under Vacuum	11
	Single Pass Purification	9
	Total	**111**
Flanges	Purification Fill and Test	6
	Circulation Station 1	5
	Circulation Station 2	5
	Conditioning Station	5
	N2 Source	4
	Purification Antechamber	4
	Fill and Test Antechamber	4
	FTIR Purification	5
	Halo LP	3
	FTIR Fill and Test	3
	Vacuum Pump	2
	Gas Phase Conditioning Under Vacuum	5
	Single Pass Purification	4
	Total	**55**
Pumps	Purification Fill and Test	3
	Circulation Station 1	2
	Circulation Station 2	2
	Conditioning Station	1
	N2 Source	0
	Purification Antechamber	0
	Fill and Test Antechamber	0
	FTIR Purification	0
	Halo LP	0
	FTIR Fill and Test	0
	Vacuum Pump	1
	Gas Phase Conditioning Under Vacuum	1
	Single Pass Purification	0
	Total	**10**
Seals	Purification Fill and Test	21
	Circulation Station 1	17
	Circulation Station 2	17
	Conditioning Station	16
	N2 Source	10

	Purification Antechamber	12
	Fill and Test Antechamber	12
	FTIR Purification	14
	Halo LP	10
	FTIR Fill and Test	9
	Vacuum Pump	8
	Gas Phase Conditioning Under Vacuum	17
	Single Pass Purification	13
	Total	**176**

Table 2

*Valves: (ex., control, isolation, pressure relief, and metering valves), Flanges: (ex., bolted connections and valves), Pumps, and Seals.

Emission Rate Calculations (see section 5.6 Calculation Methodologies)

The table below summarizes estimated emissions before and after abatement:

Emission Source	Estimated Emissions (kg/year)	Operating Hours	Basis
Fugitive - Total	**0.818**	2,080	*Total fugitive emissions are based on CARB CATEF and actual component counts.*
Fugitive – Valves	0.277	2,080	*Emissions occur during active operating hours; lines are drained when idle.*
Fugitive – Flanges	0.026	2,080	
Fugitive – Pumps	0.270	2,080	
Fugitive – Seals	0.245	2,080	
Storage Losses (Breathing)	**0.44**	8,760	*Occurs continuously; calculated using AP-42 (temperature-driven losses).*
Transfer Emissions	**0.003**	2,080	*Emissions occur during active operating hours; lines are drained when idle.*
Total Before Abatement	**1.261**		*Sum all emissions prior to control equipment.*
Final Emissions After CLEANSORB	***0.0063***		*Reflects control efficiency of 99.5% from manufacturer specification.*

Table 3

Fugitive emissions were calculated using CARB CATEF emission factors for valves, flanges, pumps, and seals adjusted for the facility's actual operating schedule of 8 hours per day, 5 days per week (2,080 hours per year). Post-abatement emissions reflect CLEANSORB® system control efficiency of 99.5%.

3.3 Dispersion Modeling Results Summary

To support the health risk assessment for hydrazine emissions from the RASIRC Imperial facility, AERSCREEN dispersion modeling was conducted by All4 Consulting. The modeling was performed in

accordance with the Imperial County Air Pollution Control District (ICAPCD) permitting requirements and the OEHHA Air Toxics Hot Spots Risk Assessment Guidance Manual (2015).

The purpose of the modeling was to predict hydrazine air concentrations at:

- The Point of Maximum Impact (PMI) located at the facility fence line.
- Offsite sensitive critical receptor locations, including residential areas, schools, and healthcare facilities.

These modeled concentrations serve as the basis for calculating:

- Chronic Hazard Index (HI) for long-term, non-cancer inhalation exposure.
- Acute Hazard Index (HI) for short-term exposure risk.
- Inhalation Cancer Risk based on lifetime exposure assumptions.

The emission rate used as model input reflects post-abatement hydrazine emissions of 0.0063 kg/year, after applying the 99.5% CLEANSORB® control efficiency.

3.4 Modeled Receptor Concentrations and Risk Summary

Modeled Receptor Concentrations

Modeled Receptor ConcentrationsReceptor	Distance (m)	Direction from Facility	Maximum 1-Hour Concentration (µg/m³)	Annual Average Concentration (µg/m³)	Chronic HI (unitless)	Acute HI (unitless)	Cancer Risk (unitless)
Brawley Residential Area	5,868	NW	1.17E-05	1.17E-06	5.84E-06	1.17E-04	5.72E-09
Brawley Union High School	8,069	NNW	8.86E-06	8.86E-07	4.43E-06	8.86E-05	4.34E-09
Miguel Hidalgo Elementary	6,550	NNW	1.06E-05	1.06E-06	5.32E-06	1.06E-04	5.21E-09
Pioneers Memorial Healthcare	6,736	NW	1.04E-05	1.04E-06	5.19E-06	1.04E-04	5.09E-09
Fenceline / PMI	46	N	2.18E-03	2.18E-04	1.09E-03	0.02	1.07E-06

Risk Summary

Risk Parameter	Value	Unit (Source)

Inhalation Unit Risk Factor (IUR)	4.90E-03	$[\mu g/m^3]^{-1}$ (EPA IRIS
Chronic Reference Exposure Level (REL)	0.2	$\mu g/m^3$ (OEHHA)
Acute Reference Exposure Level (REL)	0.1	$\mu g/m^3$ (OEHHA)

Table 4

Full modeling outputs and documentation are provided in Appendix A: AERSCREEN Model Report.

4. Health Risk Characterization

This section presents the health risk characterization for hydrazine emissions from the RASIRC Imperial facility, including both cancer and non-cancer risk assessments. The approach follows the OEHHA Air Toxics Hot Spots Risk Assessment Guidance Manual (2015) and Imperial County APCD permitting requirements.

The assessment evaluates:

- Chronic Hazard Index (HI) for long-term non-cancer effects.
- Acute Hazard Index (HI) for short-term exposure risks.
- Cancer risk associated with lifetime hydrazine inhalation exposure.

The sensitive critical receptor concentrations used in the risk calculations were determined through AERSCREEN dispersion modeling, as documented in Appendix A: AERSCREEN Model Report.

4.1 Hydrazine (N_2H_4) Overview

Chemical Properties

Description:	Colorless, oily liquid or white crystals
Molecular Weight:	32.05 g/mol
Boiling Point:	113.5°C (Merck, 1983; CRC, 1994)
Melting Point:	2.0°C
Vapor Pressure:	14.4 torr @ 25°C
Conversion Factor:	1.31 µg/m3 at 25ºC = 1 ppm
Solubility:	Miscible with water, methyl-, ethyl-, isobutyl alcohols

Hazard Summary

Symptoms of acute (short-term) exposure to high levels of hydrazine may include irritation of the eyes, nose, and throat, dizziness, headache, nausea, pulmonary edema, seizures, and coma in humans. Acute exposure can also damage the liver, kidneys, and central nervous system in humans. The liquid is corrosive and may produce dermatitis from skin contact in humans and animals. Effects on the lungs, liver, spleen, and thyroid have been reported in animals chronically (long-term) exposed to hydrazine via inhalation. Increased incidences of lung, nasal cavity, and liver tumors have been observed in rodents exposed to hydrazine. EPA has classified hydrazine as a Group B2, probable human carcinogen.

Toxicity Summary

Parameter	Value (Source)
Cancer Risk Inhalation Unit Risk (IUR)	4.9 per µg/m³ (EPA IRIS)
Chronic Reference Exposure Level (Chronic REL)	0.2 µg/m³ (OEHHA)
Acute Reference Exposure Level (Acute REL)	0.1 µg/m³ (OEHHA)
Carcinogenic Classification	EPA Group B2 – Probable Human Carcinogen
Inhalation Slope Factor (SF)	17 mg/kg/day (EPA IRIS)
Oral Slope Factor (OSF)	Excluded – No ingestion exposure pathway at this facility

Table 5

4.2 Reproductive/Developmental Effects

Information is not available on the reproductive or developmental effects of hydrazine in humans. Data regarding developmental effects in animals are limited to a study in which hydrazine was injected into pregnant rats that resulted in fetotoxicity including increased fetal and neonatal mortality. Inhalation of hydrazine for a year resulted in effects to the ovaries, endometrium, and uterus in female rats and to the testes in male hamsters.

4.3 Cancer Risk

Adequate information is not available on the carcinogenic effects of hydrazine in humans. Increased incidences of lung and liver tumors have been observed in mice exposed to hydrazine by inhalation, in their drinking water, via gavage and injection. Tumors in the nasal cavity were observed in rats and hamsters exposed by inhalation.

EPA has classified hydrazine as a **Group B2**, probable human carcinogen using mathematical models based on animal studies, to estimate the probability of a person developing cancer from breathing air containing a specified concentration of hydrazine. EPA calculated that an individual continuously breathes air containing hydrazine at an average of 0.0002 µg/m3 over his or her entire lifetime, that person would theoretically have no more than a one-in-a-million increased chance of developing cancer. Similarly, EPA estimated that breathing air containing 0.002 µg/m3 would result in a less than a one-in-a-hundred thousand increased chance of developing cancer, while air containing 0.02 µg/m3 would result in a less than a one-in-ten thousand increased chance of developing cancer.

4.4 Reference Exposure Levels (REL)

Reference Exposure Levels (REL) are health-based air concentration limits set by the Office of Environmental Health Hazard Assessment (OEHHA) to protect the public from long-term exposure to air toxics. RELs represent the concentration of a substance in air that is unlikely to cause adverse health effects in sensitive populations, including children, the elderly, and individuals with pre-existing conditions.

Since the primary exposure pathway for hydrazine emissions is inhalation, the Chronic and Acute RELs provide critical thresholds for assessing non-cancer health risks to nearby sensitive receptors.

- Chronic REL: Represents continuous inhalation exposure over a lifetime (long-term exposure).
- Acute REL: Represents exposure over a short duration (typically 1-hour exposure).
- 8-Hour REL: Accounts for occupational or repeated daily exposure scenarios.

The Chronic Inhalation REL represents the concentration at which long-term exposure to hydrazine in air is not expected to cause adverse non-cancer health effects. For hydrazine, the Chronic Inhalation REL is **0.2 ug/m³** or **0.1 ppb**.

The facility's predicted ambient air concentrations for hydrazine will be compared to this REL value to determine whether there is a potential non-cancer health risk. If the modeled concentrations of hydrazine at any sensitive receptor exceed 0.2 µg/m³, it could indicate the potential for chronic non-cancer health effects, thus requiring additional mitigation measures.

4.5 California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

Carcinogenic Risk Assessment

As Proposition 65 identifies hydrazine as a carcinogen, a carcinogenic risk assessment will use the inhalation unit risk and cancer potency factors to determine if exposure levels exceed the *No Significant Risk Level* (NSRL) concentration threshold of **0.04 ug/day** at the critical receptor locations. If inhalation exposure to hydrazine remains below 0.04 µg/day, no Proposition 65 warning or mitigation measures will be required, however if exposure exceeds 0.04 µg/day, RASIRC may be required to issue public notifications under Proposition 65 and consider additional emission controls to reduce risk.

To assess whether emissions exceed NSRL, the HRA will calculate the airborne hydrazine concentration (µg/m³) at sensitive receptors using dispersion modeling (e.g., AERSCREEN). Inhalation exposure estimates will be based on receptor location, breathing rates, and exposure durations (e.g., 24-hour residential exposure vs. 8-hour worker exposure).

4.6 Exposure & Toxicological Reference Values

Table 1
CONSOLIDATED TABLE OF OEHHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES[a]

Substance	Chemical[b] Abstract Number	Noncancer Effects								Cancer Risk					
		Acute Inhalation (µg/m³)	Date[c] Value Reviewed [Added]	8-Hour Inhalation (µg/m³)	Date[c] Value Reviewed [Added]	Chronic Inhalation (µg/m³)	Date[c] Value Reviewed [Added]	Chronic Oral (mg/kg-d)	Date[c] Value Reviewed [Added]	Inhalation[d] Unit Risk (µg/m³)⁻¹	Inhalation[d] Cancer Potency Factor (mg/kg-d)⁻¹	Date[c] Value Reviewed [Added]	Oral Slope Factor (mg/kg-d)⁻¹	Date[c] Value Reviewed [Added]	M[e] W A F
HYDRAZINE	302-01-2					2.0E-01	1/01			4.9E-03	1.7E+01	4/99 [7/90]			1

Table 6

The OEHHA's Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values is the comprehensive reference for health-based toxicity values for air pollutants, including cancer potency factors, inhalation unit risks, chronic and acute reference exposure levels (RELs), and other risk

assessment parameters. These values are used in California's Air Toxics Hot Spots Program and health risk assessments (HRAs) to evaluate potential human health impacts from airborne toxic pollutants. The table is maintained by the Office of Environmental Health Hazard Assessment (OEHHA) and the California Air Resources Board (CARB) to support regulatory compliance and risk-based decision-making.

Inhalation Unit Risk (IUR) represents the estimated increase in cancer risk per unit of hydrazine concentration in the air (measured in micrograms per cubic meter, $\mu g/m^3$). For hydrazine, the Inhalation Unit Risk is **4.9 per ug/m^3** which means that a person exposed to 1 $\mu g/m^3$ of hydrazine continuously over a lifetime, say 70 years, the excess cancer risk would be 4.9 additional cases per 1,000 individuals.

The **Inhalation Slope Factor** (ISF) is an estimate of cancer risk per unit dose of hydrazine inhaled per body weight per day (mg/kg/day) and is used to convert exposure doses into risk estimates. For hydrazine, the Inhalation Slope Factor is **17 mg/kg/day** meaning that for each 1 mg of hydrazine inhaled per kilogram of body weight per day, the estimated cancer risk is 17 additional cases per 1,000 exposed individuals. Note: The ISF is particularly important for estimating risks in occupational settings where inhalation exposure may be higher.

The **Oral Slope Factor** (OSF) is used to estimate cancer risk from ingestion exposure to hydrazine and represents the increased risk per unit oral dose (i.e., mg/kg/day). Hydrazine's OSF is **3 mg/kg/day**, which means that for each mg of hydrazine ingested per kg of body weight per day, there is an expected increase of 3 additional cancer cases per 1,000 exposed individuals.

For the purposes of the RASIRC facility's Health Risk Assessment, the Oral Slope Factor is not applicable as there is no risk of soil or water contamination from facility operations. Since hydrazine exposure at the facility is limited to air emissions, this Health Risk Assessment will focus exclusively on the Inhalation Unit Risk (IUR) and Inhalation Slope Factor (ISF) for cancer risk characterization.

4.7 Hazard Index for Chronic Exposure

The Imperial County Air Pollution Control District (ICAPCD) and California Environmental Quality Act (CEQA) regulations require evaluation of chronic non-cancer risks for industrial projects emitting toxic air contaminants near sensitive receptors. To address this requirement, air dispersion modeling was conducted to quantify hydrazine exposure levels at nearby receptor locations, including the Point of Maximum Impact (PMI) at the facility fence line.

The Hazard Index (HI) is used to assess the potential for long-term (chronic) non-cancer health effects from continuous inhalation exposure. The HI compares the modeled annual average hydrazine concentration at the PMI to the OEHHA Chronic Reference Exposure Level (REL) of 0.2 $\mu g/m^3$.

- **HI < 1.0:** No significant chronic health concern.

- **HI ≥ 1.0:** Potential health impact; may require further review, mitigation, or emission controls.

The HI is calculated using the following formula:

$$\text{Hazard Index (HI)} = \frac{\text{Predicted Annual Average Concentration at Receptor}}{\text{Chronic REL } (\mathbf{0.2\ \mu g/m^3})}$$

Receptor	Annual Average Concentration (µg/m³)	Chronic REL (µg/m³)	Hazard Index
Brawley Residential Area	1.17E-06	0.2	5.85E-06 (0.00000585)
Brawley Union High School	8.86E-07	0.2	4.43E-06 (0.00000443)
Miguel Hidalgo Elementary	1.06E-06	0.2	5.30E-06 (0.00000530)
Pioneers Memorial Healthcare	1.04E-06	0.2	5.20E-06 (0.00000520)
Fenceline / PMI	2.18E-04	0.2	1.09E-03 (0.00109)

Table 7

4.8 Modeled Annual Average Concentration ($C_{average}$)

The AERSCREEN dispersion model predicted a maximum 1-hour hydrazine concentration of 2.18E-03 µg/m³ (0.00218 µg/m³) at the Point of Maximum Impact (PMI), located at the facility fence line.

To conservatively estimate annual average exposure from this short-term dispersion model output, an adjustment factor of 0.1 was applied, following guidance from the OEHHA 2015 Air Toxics Hot Spots Risk Assessment Manual. This adjustment accounts for typical variability between short-term peak concentrations and long-term average conditions.

The formula for converting the modeled 1-hour maximum concentration to an annual average concentration is:

$$C_{average} = C_{1\text{-}hr\ max} \times Adjustment\ Factor$$

$$C_{avg} = 0.00218\ \mu g/m^3 \times 0.1 = 0.000218\ \mu g/m^3$$

This annual average concentration (0.000218 µg/m³) is then used in the chronic non-cancer hazard index (HI) calculation presented in the following section.

4.9 Toxicity Reference Values

The following table summarizes the toxicity reference values and target organ systems used in the cancer and non-cancer risk assessments for hydrazine, including the inhalation unit risk factor and the chronic and acute reference exposure levels (RELs) applied in this evaluation

Substance	Cancer Risk (IUR)	Chronic REL ($\mu g/m^3$)	Acute REL ($\mu g/m^3$)	Target Organ Systems
Hydrazine (N_2H_4)	4.9 per $\mu g/m^3$	0.2	0.1	Respiratory, Nervous, Liver, Kidney

Table 8

- **Carcinogenicity Classification**: EPA Group B2 – Probable Human Carcinogen
- **Inhalation Slope Factor (ISF)**: 17 mg/kg/day
- **Oral Slope Factor (OSF) Exclusion**: No ingestion exposure at this facility

Sources

Cancer Risk (IUR: 4.9 per $\mu g/m^3$) - Source: EPA Integrated Risk Information System (IRIS) for Hydrazine; Reference: U.S. Environmental Protection Agency (EPA), IRIS Database

Chronic Reference Exposure Level (REL: 0.2 $\mu g/m^3$) - Source: Office of Environmental Health Hazard Assessment (OEHHA); Reference: OEHHA Air Toxics Hot Spots Risk Assessment Guidance

Acute Reference Exposure Level (REL: 0.1 $\mu g/m^3$) - Source: OEHHA Toxicity Reference Levels; Reference: California Air Resources Board (CARB) & OEHHA Health Risk Guidelines

Carcinogenicity Classification (EPA Group B2 – Probable Human Carcinogen) - Source: EPA IRIS (Hydrazine Carcinogenicity Assessment); Reference: U.S. EPA's Guidelines for Carcinogen Risk Assessment

Inhalation Slope Factor (ISF: 17 mg/kg/day) - Source: EPA IRIS Database; Reference: U.S. EPA Dose-Response Assessment for Hydrazine

Oral Slope Factor (OSF) – Not Included in the Report; Reason for Exclusion: No ingestion pathway at this facility; Source (if needed): EPA IRIS Oral Toxicity Assessment

Cancer Risk Evaluation (Proposition 65 Compliance)

- **No Significant Risk Level (NSRL):** 0.04 µg/day
- **Modeled Exposure:** Below NSRL → No public notification required

5.0 Cancer Risk Assessment at Sensitive Receptors

The risk levels at sensitive receptors in Section 5.1 were determined using calculated air dispersion modeling, exposure assessment methodologies, and toxicological reference values. Sections 5.2 – 5.4 provide a detailed breakdown of the parameters, exposure and receptor assumptions, and data sources used in the assessment.

5.1 Cancer Risk Levels at Sensitive Receptors (AERSCREEN Modeling Output)

Receptor Location	Distance from Facility (meters)	Annual Average Concentration (µg/m³)	Cancer Risk (per million) *Unadjusted*	Cancer Risk (per million) **Adjusted*
Point of Maximum Impact	46 m	2.18E-04 or 0.000218	1.07	0.89
Brawley Residential Area	5,868 m NW	1.17E-06 or 0.00000117	0.00573	<< 1 (effectively zero)
Brawley Union High School	8,069 m NNW	8.86E-07 or 0.000000886	0.00434	<< 1
Miguel Hidalgo Elementary	6,550 m NNW	1.06E-06 or 0.00000106	0.00519	<< 1
Pioneers Memorial Healthcare	6,736 m NW	1.04E-06 or 0.00000104	0.00509	<< 1

Table 9

*Cancer risks reflect OEHHA's recommended **residential adjustment factor of 0.83**, which accounts for age sensitivity and residential occupancy patterns over a 70-year lifetime exposure period.

5.2 Chronic and Acute Hazard Indices (HI) at Sensitive Critical Receptors

Receptor Location	Distance from Facility (meters)	Annual Average Concentration (µg/m³)	Chronic HI	Acute HI
Point of Maximum Impact (PMI)	46	2.18E-04 or 0.000218	1.09E-03 or 0.00109	0.02
Brawley Residential Area	5,868 NW	1.17E-06 or 0.0000117	5.85E-06 or 0.0000058	1.17E-04 or 0.000117

Brawley Union High School	8,069 NNW	8.86E-07 or 0.00000886	4.43E-06 or 0.0000044	8.86E-05 or 0.0000886
Miguel Hidalgo Elementary	6,550 NNW	1.06E-06 or 0.0000106	5.30E-06 or 0.00000530	1.06E-04 or 0.00010
Pioneers Memorial Healthcare	6,736 NW	1.04E-06 or 0.0000104	5.20E-06 or 0.00000104	1.04E-04 or 0.000104

Table 10

5 mile Critical Receptor Map

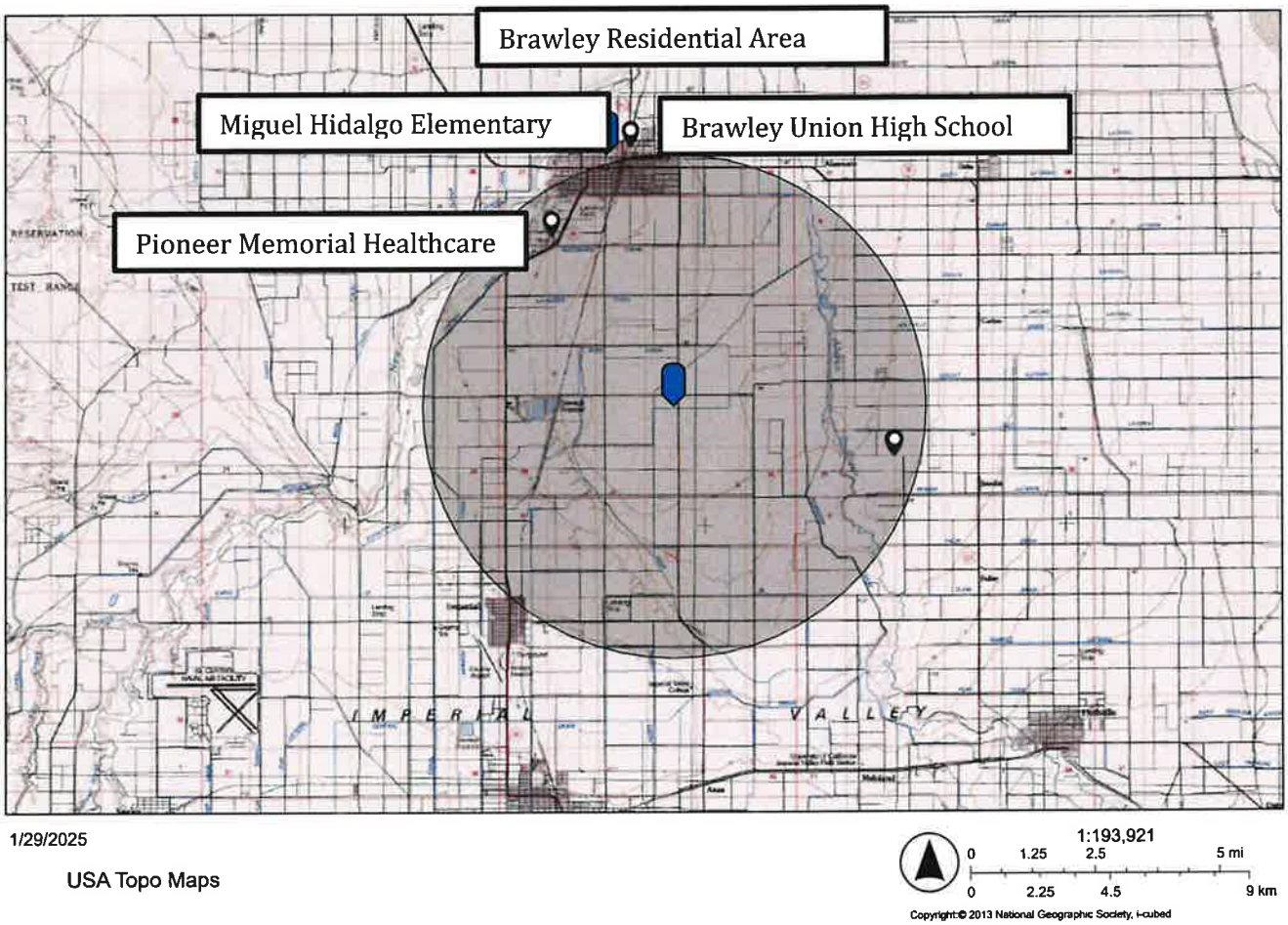

Figure 1

5.3 Air Dispersion Modeling Parameters

Parameter	Details
Model User	AERSCREEN (EPA-Approved Gaussian dispersion model)
Source Characterization	Stack emissions source (point source)
Emission Rate (Post-Abatement)	0.0063 kg/year (hydrazine)

Stack Height	20 ft
Stack Diameter	14 inches
Exhaust Rate	2,300 CFM
Fence Line Distance (Point of Maximum Impact)	150 feet (46 meters)
Meteorological Conditions	Worst-case scenario (low wind speed, stable atmospheric conditions)
Meteorological Data Source	Imperial County Airport (5 years)
Receptor Grid	Nearest sensitive receptors (5 mile radius), including Point of Maximum Impact
Terrain Effects	Flat rural terrain, minor building downwash effects
Topographical Data Source	CARB's HARP Digital Elevation Model Files (Mesquite Lake)

Table 11

5.4 Exposure & Receptor Assumptions

Exposure Factor	Assumptions
Exposure Duration (Residential)	70-year lifetime exposure assumption
Exposure Duration (Schools and Hospital)	8-hour daily exposure (school/work setting)
Breathing Rate (Residential)	20 m^3/day (adult inhalation rate)
Breathing Rate (Children at Schools)	10 m^3/day (child inhalation rate)
Toxicological Basis	OEHHA Reference Exposure Levels (RELs) and Inhalation Unit Risk (IUR) factors

Table 12

5.5 Exposure & Receptor Assumptions (See 5.6 Calculation Methodologies)

Step	Calculation & Assumptions
Modeled Concentration at Receptors	Estimated air dispersion model output (AERSCREEN) maximum 1-hour concentrations for each receptor (PENDING)
Chronic Exposure Adjustment	Modeled concentrations were converted into annual average for chronic exposure assessment
Cancer Risk Calculation	Cancer Risk = (IUR) x (Annual Concentration) x (Breathing Rate) x (Exposure Duration)
Chronic & Acute Hazard Index Calculation	Hazard Index (HI) = (Modeled Concentration) / (Chronic REL or Acute REL)
Compliance Evaluation	Risk levels were compared to regulatory thresholds (10-in-a-million cancer risk, HI = 1.0 limit for non-cancer risks)

Table 13

5.6 Calculation Methodologies

This section details the formulas and data sources used for emissions estimation, health risk characterization, and dispersion modeling assumptions.

Emission Rate Calculations (Referenced in Section 3.2 Source Characterization)

Emission rates were estimated using standard methodologies, including California Air Resources Board (CARB) emission factors, U.S. EPA AP-42 guidelines, and SCAQMD guidelines. The following formulas were used:

Fugitive Emissions (Valves, Flanges, Pumps, Seals) (Referenced in Table 3, Emission Sources)

Component Type	Count (N)	CARB CATEF Emission Factor (g/hr)
Valves	111	0.0012 g/hr
Flanges	55	0.00023 g/hr
Pumps	10	0.013 g/hr
Seals	176	0.00067 g/hr

Table 14

Fugitive emissions were calculated using CARB California Air Toxics Emission Factor (CATEF) values, where the emission factors are expressed in grams per hour per component type. The emission rate formula is:

$$E_{fugitive} = \sum (EF_{valves} \times N_{valves} + EF_{flanges} \times N_{flanges} + EF_{pumps} \times N_{pumps}) \times 2080$$

Where:

$E_{fugitive}$ = Total fugitive emissions (kg/year)

EF_{valves} = Emission factor for valves (**0.0012 g/hr**). source: CARB California Air Toxics Emission Factor (CATEF) database (g/unit/hour)

$EF_{flanges}$ = Emission factor for flanges (0.00023 g/hr)

EF_{pumps} = Emission factor for pumps (0.013 g/hr)

EF_{seals} = Emission factor for seals (0.00067 g/hr)

N_{valves} = Number of valves **(111)** source: RASIRC Facility P&ID

$N_{flanges}$ = Number of flanges **(55)**

N_{pumps} = Number of pumps **(10)**

Operating Hours = (8 hours per day x 5 days per week x 52 weeks per year) = **2080**

Component Type	Count (N)	Emission Factor (EF, g/hr)	Contribution (g/hr)
Valves	111	0.0012	0.1332
Flanges	55	0.00023	0.01265
Pumps	10	0.013	0.13
Seals	176	0.300067	0.118
Total	--	--	**0.39385**

Table 15

$E_{fugitive}$= 0.39385 g/hr × 2080hours/year = 818.81 g/year = 0.81881 kg/year

Calculated Fugitive Emissions: 0.81881 kg/year

==========

Storage Losses (Referenced in Section 3.2 Source Characterization - Storage Losses)

Storage tank emissions were estimated using breathing loss equations from U.S. EPA AP-42 Chapter 7.1, which predict vapor losses from pressure and temperature changes in fixed-roof tanks.

Because breathing losses occur continuously (24 hours/day, 365 days/year), the total storage emissions were not scaled to the operating hours of the facility. This approach follows standard risk assessment practice, where standing losses are independent of process uptime.

Working losses and transfer emissions were adjusted according to the facility's operational schedule of 2,080 hours/year.

$$Estorage = (P \times V \times K \times T)$$

Where:

$E_{storage}$ = Storage loss emissions (kg/year)

P = **14.4 torr** - Vapor pressure of hydrazine (torr). source: CRC Handbook

V = **2 m³** - Volume of storage tank (m³)

K = **0.0015** - Temperature-dependent loss factor. source: EPA AP-42

T = **8760 hours/year** – Facility operating hours per year

Calculated Storage Losses: 0.44 kg/year

==========

Transfer Emissions (Referenced in Section 3.2 Source Characterization - Transfer Emissions)

$$E_{transfer}=(Q \times EF)$$

Where:

$E_{transfer}$ = Emissions from transfer operations (kg/year)

Q = **500 kg/year** – Annual quantity transferred (kg). source: Shipping records

EF = **0.0000006** - Emission factor (g/kg). source: SCAQMD database

Calculated Transfer Emissions: 0.003 kg/year

==========

Post-Abatement Emissions (Referenced in Section 3.2 Source Characterization - Final Emissions After CLEANSORB)

$$E_{post}=E_{total}\times(1-\eta)$$

Where:

E_{post} = Final emissions after abatement (kg/year)

E_{total} = ***1.261*** kg/year - Sum of all emissions before abatement (kg/year)

η = **99.5% or 0.995** - Control efficiency of the CLEANSORB® abatement system (99.5%). source: Manufacturer specifications

Calculated Final Emissions After CLEANSORB: *0.0063* kg/year

==========

Chronic Hazard Index Calculation (Referenced in Section 4.7 Hazard Index for Chronic Exposure)

$$HI = \frac{C_{avg}}{REL}$$

Where:

HI = Hazard Index (unitless)

C_{avg} = **0.000218 ug/m³** – Modeled annual hydrazine concentration (µg/m³). source: AERSCREEN

REL = **0.2 µg/m³** - Chronic Reference Exposure Level. source: OEHHA

Calculated Hazard Index: 0.00109

==========

Cancer Risk (Point of Maximum Impact)

The unadjusted cancer risk at the Point of Maximum Impact (PMI), assuming continuous exposure over a lifetime, was calculated as approximately **1.07**.
However, applying OEHHA-recommended scaling factors for residential occupancy and age sensitivity adjustment results in a **final adjusted cancer risk of 0.89in a million**.

$$R_{cancer}=C_{avg}\times IUR$$

Where:

R_{cancer} = Cancer Risk per million

C_{avg} = **0.000218 ug/m³** - Modeled annual average concentration (AERSCREEN)

IUR = **4.9 per ug/m³** – Hydrazine-specific Inhalation Unit Risk. source: OEHHA Risk Assessment Guidelines

Residential Adjustment Factor = 0.83 (OEHHA)

Adjusted Cancer Risk = 1.07 x 0.83 = 0.89 in a million

5.7 Data Sources

- OEHHA Air Toxics Hot Spots Risk Assessment Guidelines
- EPA IRIS (Integrated Risk Information System) for Hydrazine Toxicity
- CARB Toxic Air Contaminant Program Reference Values
- AERSCREEN Air Dispersion Model Outputs
- Imperial County Airport Meteorological Data

6.0 Health Risk Assessment Summary of Findings

Point of Maximum Impact (PMI)

The AERSCREEN dispersion modeling (refer to Section 3.4) identified the **Point of Maximum Impact (PMI)** at the facility fence line as the location of the highest predicted hydrazine concentrations. At this location, the following health risk values were calculated (refer to Section 5.1):

- **Acute Hazard Index (HI): 0.02**
- **Cancer Risk (adjusted for residential exposure using OEHHA scaling factors): 0.89 in a million**

Both values are well below their respective health risk screening thresholds of 1.0 for Hazard Index and 10 in a million for cancer risk, as established by the California Office of Environmental Health Hazard Assessment (OEHHA) and the Imperial County Air Pollution Control District (ICAPCD).

The PMI is located within a secured, access-controlled perimeter, with no permanent human receptors present at this location. The exposure scenario reflects a conservative, worst-case assumption of continuous lifetime exposure directly at the fence line, not actual human occupancy.

Findings at Offsite Sensitive Receptors

As detailed in Section 5.1, all evaluated offsite sensitive receptor locations, including nearby residences, schools, and healthcare facilities, also demonstrate:

- Cancer risks well below the 10 in a million screening threshold.
- Chronic and acute Hazard Indices (HI) below the screening level of 1.0.

Conclusion

The RASIRC Health Risk Assessment and supporting AERSCREEN Model confirms that the project remains well within public health risk standards under both OEHHA and ICAPCD guidelines. The results demonstrate that no exceedances occur at either the PMI or offsite sensitive receptors, and therefore, no additional mitigation or control measures are required based on the current emissions scenario and abatement systems.

Endnotes

[1] Office of Environmental Health Hazard Assessment (OEHHA). (2015). *Air Toxics Hot Spots Program Guidance Manual*. Sacramento, CA: California Environmental Protection Agency.

[2] Imperial County Air Pollution Control District (ICAPCD). (2025). *Air quality and permitting regulations*. Imperial County, CA.

[3] California Air Resources Board (CARB). (1996). *Toxic Air Contaminant Program Reference Values*. Sacramento, CA: California Environmental Protection Agency.

[4] United States Environmental Protection Agency (EPA). (2000). *AP-42: Compilation of Air Pollutant Emission Factors, Chapter 8 - Inorganic Chemical Industry*. Washington, DC.

[5] South Coast Air Quality Management District (SCAQMD). (2023). *Emissions modeling and regulatory guidelines*. Diamond Bar, CA.

[6] United States Environmental Protection Agency (EPA). (2024). *Integrated Risk Information System (IRIS): Hydrazine Toxicity and Risk Factors*. Washington, DC.

[7] State of California. (1986). *California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)*. Sacramento, CA.

[8] California Air Resources Board (CARB). (2023). *HARP Digital Elevation Model Files for Air Dispersion Modeling*. Sacramento, CA.

[9] National Weather Service. (2025). *Meteorological Data for Imperial County Airport*. Retrieved from NWS.gov

[10] CLEANSORB® Manufacturer. (2025). *Hydrazine Abatement Efficiency Specifications*. Technical Documentation.

Tables and Figures

Table/Figure	Description	Location/Section in Document
Table 1	Critical Receptors	Section 2.2
Table 2	Fugitive Source Quantification	Section 3.2 (Emission Sources)
Table 3	Emission Rate Calculations	Section 3.2 (Emission Sources)
Table 4	Modeled Receptor Concentrations & Risk Summary	Section 3.4
Table 5	Toxicity Summary (Hydrazine)	Section 4.1
Table 6	Exposure & Toxicological Reference Values	Section 4.6
Table 7	Hazard Index for Chronic Exposure	Section 4.7
Table 8	Toxicity Reference Values	Section 4.9
Table 9	Cancer Risk Levels at Sensitive Receptors	Section 5.1
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Figure 1	Map or Visual of Sensitive Receptors	Section 5.2
Table 11	Air Dispersion Modeling Parameters	Section 5.3
Table 12	Exposure & Receptor Assumptions	Section 5.4
Table 13	Exposure & Receptor Assumptions Calculation Steps	Section 5.5
Table 14	Fugitive Emission Factors and Component Counts	Section 5.6 (Emission Rate Calculations)
Table 15	Fugitive Emission Rate Calculations	Section 5.6 (Emission Rate Calculations)

Appendix A: AERSCREEN Model

SCREENING HEALTH RISK ASSESSMENT AIR

MODELING REPORT

RASIRC, LLC – IMPERIAL COUNTY, CA

MAY 2025

SUBMITTED BY:

RASIRC, LLC
RASIRC Imperial Facility

SUBMITTED TO:

Imperial County Air Pollution Control District
150 S. 9th Street
El Centro, CA 92243

INFO@ALL4INC.COM
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STRATEGY WITH SOLUTION.
PARTNERSHIP WITH A PURPOSE.

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LIST OF APPENDICES

1. INTRODUCTION

RASIRC, LLC (RASIRC) is proposing to install and operate an anhydrous hydrazine processing facility in Imperial County, California (Facility). RASIRC is submitting this air quality modeling report (Modeling Report) as part of a Health Risk Assessment (HRA) in accordance with the California Environmental Quality Act (CEQA) at the request of the Imperial County Air Pollution Control District (ICAPCD or District). The Modeling Report provides a summary of the technical details used to prepare the screening health risk assessment.

As described in this Modeling Report, the controlled air toxic emissions from the Facility were included in a screening level HRA. The HRA was performed to demonstrate compliance with long-term (chronic) cancer risks, short-term (acute), and chronic non-cancer risks.

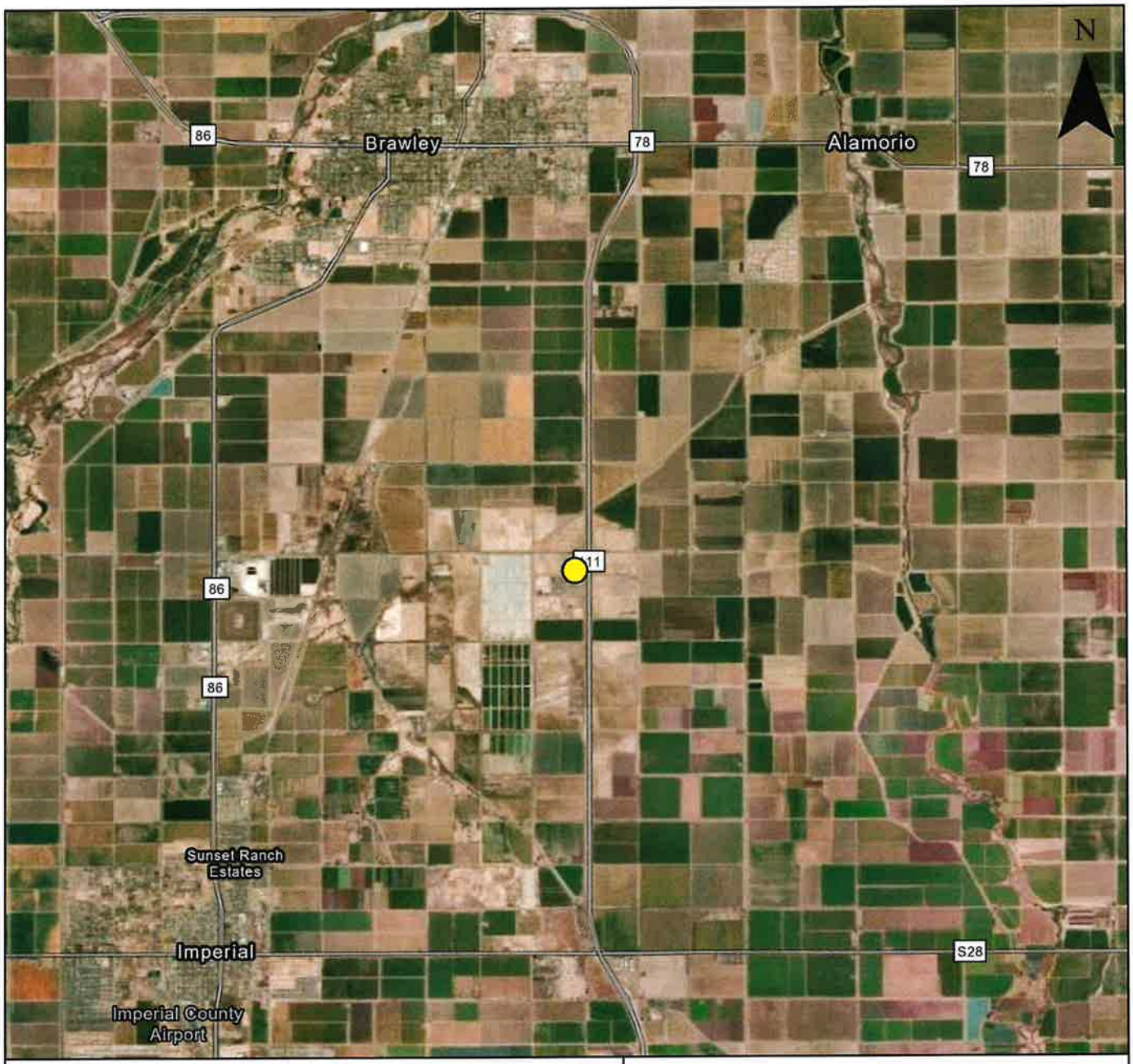
RASIRC retained ALL4 Environmental CA, LLC (ALL4) to prepare Modeling Report for submittal to ICAPCD in conjunction with RASIRC's HRA report. This Report contains the air quality modeling methodology consistent with the United States Environmental Protection Agency (U.S. EPA) "Guideline on Air Quality Models" in 40 CFR Part 51, Appendix W (Appendix W) (U.S. EPA, 2024).

2. FACILITY INFORMATION

RASIRC proposes to construct the Facility in Imperial County approximately eight kilometers (km) south of Brawley within an undeveloped area characterized by desert scrubland and agricultural fields. Surrounding areas are relatively flat with low topography. A Facility location map is provided in Figure 2-1 and a Facility site plan, including the property boundary, is provided in Figure 2-2. The geographical coordinates and elevation of the Facility are listed in table 2-1.

Table 2-1
Facility Location Information

Parameter	Value
Universal Transverse Mercator (UTM) Easting:	639,203 m
UTM Northing:	3,642,247 m
UTM Zone:	11N
North American Datum (NAD):	1983
Longitude (degrees, minutes, seconds):	115° 30' 41.19"
Latitude (degrees, minutes, seconds):	32° 54' 34.53"
Elevation above mean sea level:	-141 m



Legend

Facility

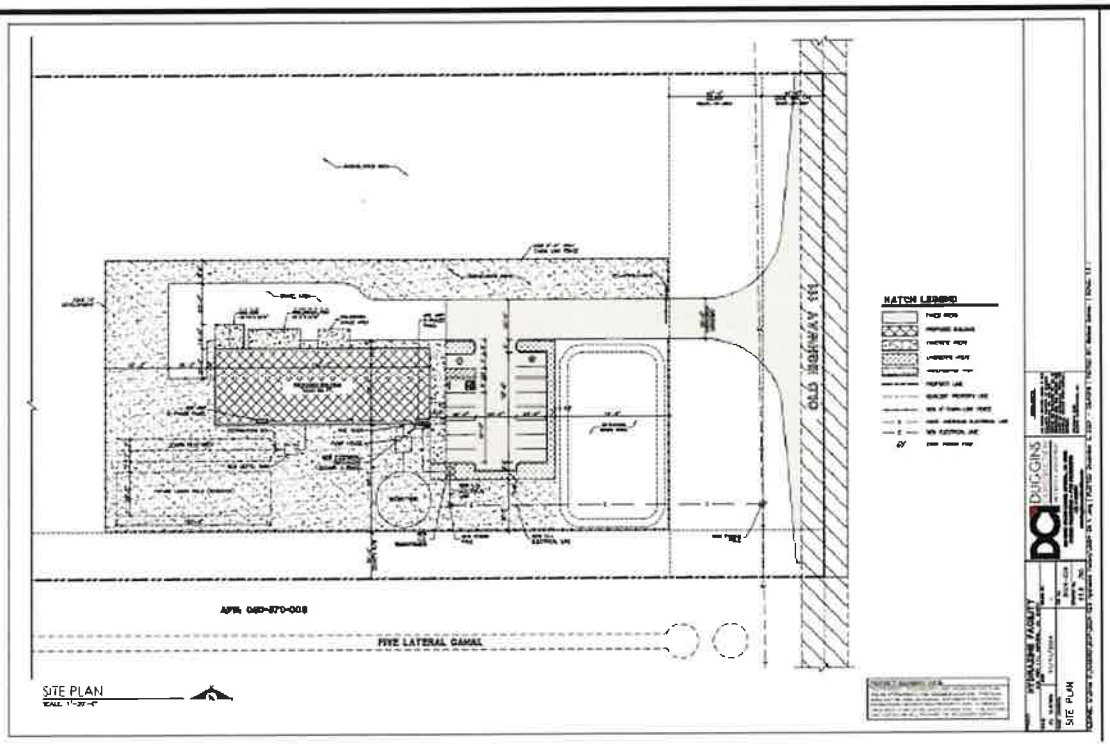
0 2.5 5 Miles

Figure 2-1
Facility Location Map

RASIRC LLC
Imperial County, CA

PREPARED BY:	CHECKED BY:
C.Q.	J.S.
DATE:	PROJECT NO.:
May 2025	005358-0001

ALL4



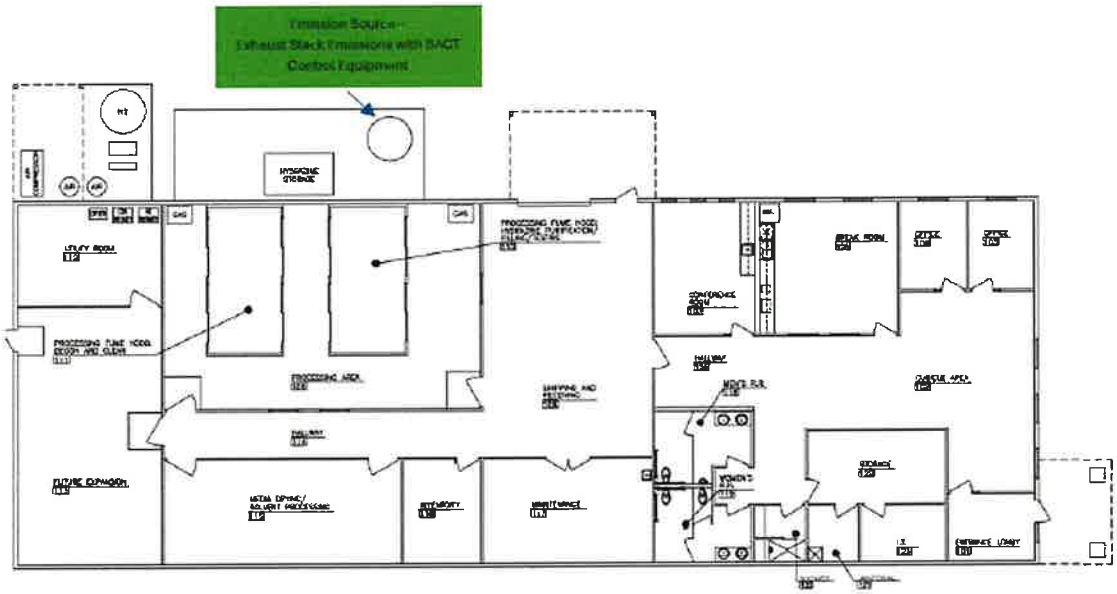


Figure 2-2
Facility Layout Map

RASIRC LLC
Imperial County, CA

DRAWN BY: C.Q.	CHECKED BY: M.M.
DATE: May 2025	

3. EMISSIONS INVENTORY

The emissions inventory was prepared by RASIRC and is further described in the RASIRC's HRA report. For the air quality modeling, the following emissions calculations were employed.

Table 3-1
Emissions Rates

Annual Controlled Emissions[a]		Hourly Controlled Emissions[a]	
(kg/yr)	(lbs/yr)	(lbs/hr)	(g/sec)
0.013	0.029	3.36E-06	4.23E-07

[a] Emissions were calculated using the following parameters:

Factor	Value
lbs/kg	2.20462
hrs/yr	8,760
sec/hr	3,600
g/kg	1,000

4. AIR QUALITY MODELING METHODOLOGY

This section summarizes the model selection, modeling parameters, and methodology used in the air quality model.

4.1 MODEL SELECTION

Based on guidance from the California Office of Environmental Health Hazard Assessment (OEHHA), a screening level HRA can be conducted using U.S. EPA preferred screening model (AERSCREEN) (OEHHA 2015) based on the American Meteorological Society/Environmental Protection Agency (AMS/EPA) (AERMOD) modeling system.

AERSCREEN consists of a command prompt program that interfaces with AERMOD. AERMOD inputs are developed using the MAKEMET and BPIPPRM programs. Each of the programs are described in more detail below:

- MAKEMET generates meteorological conditions for the Facility based on the surrounding terrain and the user-input receptors.
- BIPIPPRM evaluates the downwash effects associated with the Facility buildings.

The air quality modeling utilized the program versions listed in Table 4-1, which were current at the time of submittal.

Table 4-1
Model Versions

Model	Version
AERSCREEN	21112
AERMOD	24142
BPIPPRIM	04274
MAKEMET	16216

AERSCREEN was configured using default and user-specified parameters described in Table 4-2.

Table 4-2
Modeling Parameters

Modeling Parameter	Value
Source Type	Point Source
Stack Height (feet [ft])	20
Stack Diameter (inches)	14
Exhaust Flow (cubic feet per minute)	2,300
Exhaust Temperature (degrees Fahrenheit)	Ambient
Terrain Type	Flat
Topographic Data	None
Minimum Wind Speed (meters per second)	Default – 0.5
Anemometer Height (meters [m])	Default – 10
Building Width (ft)	140
Building Length (ft)	50
Building Height (ft)	16
Minimum Local Temperature (Kelvin [K])	269
Maximum Local Temperature (K)	322
Surface Characteristic	Desert Shrubland
Receptor Locations	Default
Probe Distance (m) [(a)]	8,100
Fenceline Distance (ft)	150
Utilize Adjust U* Parameter	Yes

[(a)] Probe distance was determined based on the farthest sensitive receptor.

4.2 RECEPTORS

In accordance with a request from ICAPCD four discrete receptors were modeled to establish ambient air concentrations and health risks at nearby sensitive receptors. Table 4-3 lists the discrete receptors and subsequent information.

Table 4-3
Discrete Receptors

Receptor Name	Type	Latitude (°)	Longitude (°)	Approximate Distance from Facility
Brawley Residential Neighborhoods	Residential	32.9781	-115.5306	4 miles NW
Brawley Union High School	School	32.9788	-115.5253	5 miles NNW
Miguel Hidalgo Elementary School	School	32.9765	-115.5278	4 miles NNW
Pioneers Memorial Healthcare	Hospital	32.9772	-115.5302	4 miles NW

Additionally, a receptor was placed at the ambient air boundary located 150 m from the Facility stack. From the ambient air boundary, additional receptors were placed at 25 m intervals extending out to 8,100 m.

4.3 GOOD ENGINEERING PRACTICE STACK HEIGHT ANALYSIS

A good engineering practice (GEP) stack height analysis was conducted to evaluate if stack emissions are subject to building wake effects and aerodynamic downwash caused by buildings included in the air quality modeling, in accordance with the "Guideline for Determination of Good Engineering Practice Stack Height" (U.S. EPA, 1985). If a stack is sufficiently close to a building, or if located adjacent to or on a building, the plume from the stack can be entrained in the building's wake, diminishing plume rise that can result in increased ground level ambient concentrations. Facilities with stack heights below their corresponding GEP formula heights must account for potential building wake effects within the air quality modeling.

There are two definitions of GEP stack height: formula GEP stack height; and regulatory GEP stack height. U.S. EPA requires building downwash effects to be evaluated for nearby buildings when a stack is less than formula GEP stack height. Regulatory GEP stack height is the greater of 65 m or formula GEP stack height. Formula GEP stack height is defined as:

$$HGEP = HB + 1.5L$$

where:

HGEP	=	formula GEP stack height,
HB	=	the building's height above stack base, and
L	=	the lesser of the building's height or maximum projected width.

The current version of U.S. EPA's Building Profile Input Program for PRIME (BPIPPRM) was used to calculate wind direction-specific downwash parameters to evaluate stacks considered close enough to a building to be affected by downwash, defined as the lesser of 0.8 km or 5L of the building in any wind direction. An initial analysis of surrounding properties using Google Earth aerial imagery indicates that no other facilities are present within 5LB of Facility emissions point locations.

4.4 METEOROLOGY

The meteorological conditions near a facility can impact the air dispersion concentrations from an emissions release. Table 4-3 lists the seasonal minimum and maximum temperatures provided by California Air Resources Board (CARB) used to develop the inputs for the AERSCREEN model (CARB).

Table 4-4
Imperial County Airport Temperature Data

Season	Maximum Temperature (K)	Minimum Temperature (K)
Winter	305	269
Spring	318	277
Summer	322	288
Fall	320	274
Annual	322	269

Additional parameters used by AERSCREEN include surface characteristics. The default parameters for dry conditions in a desert shrubland was used as the input for AERSCREEN.

5. RESULTS

The results of the air quality modeling were incorporated into the health risk assessment and are presented in Table 5-1.

Table 5-1
Air Quality Modeling Results

Receptor	Distance from Facility (m)	Direction from Facility	Maximum 1-Hour Concentration (ug/m^3)	Annual Average Concentration (ug/m^3)
Brawley Residential Area	5,868	NW	1.17E-05	1.17E-06
Brawley Union High School	8,069	NNW	8.86E-06	8.86E-07
Miguel Hidalgo Elementary	6,550	NNW	1.06E-05	1.06E-06
Pioneers Memorial Healthcare	6,736	NW	1.04E-05	1.04E-06
Fenceline	46	WSW	2.18E-03	2.18E-04

6. REFERENCES

CEQA - Title 14, Division 6, Chapter 3 of the California Code of Regulations

OEHHA 2015 – Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments, February 2015.

CARB – HARP AERSCREEN Meteorological Data. https://ww2.arb.ca.gov/resources/documents/harp-aerscreen-meteorological-data

U.S. EPA 1985 – "Guideline for Determination of Good Engineering Practice (GEP) Stack Height (Technical Support Document for Stack Height Regulations) Revised", EPA-450:4-80-023R, June 1985.

U.S. EPA 2024 – 40 CFR Part 51 Appendix W "Guideline on Air Quality Models (Revised)", November 2024.

APPENDIX A -
AERSCREEN OUTPUT

AERSCREEN 21112 / AERMOD 24142 04/22/25
17:05:31

TITLE: RASIRC_042225_v3

********** STACK PARAMETERS **********

SOURCE EMISSION RATE:	0.423E-06 g/s	0.336E-05 lb/hr
STACK HEIGHT:	6.10 meters	20.00 feet
STACK INNER DIAMETER:	0.356 meters	14.00 inches
PLUME EXIT TEMPERATURE:	Ambient	
PLUME EXIT VELOCITY:	10.930 m/s	35.86 ft/s
STACK AIR FLOW RATE:	2300 ACFM	
RURAL OR URBAN:	RURAL	
INITIAL PROBE DISTANCE =	8100. meters	26575. feet

********** BUILDING DOWNWASH PARAMETERS **********

USER DEFINED BPIPPRM INPUT FILE: RASIRC-BPIP.inp

MAXIMUM BUILDING HEIGHT:	4.9 meters	16.0 feet
MAXIMUM BUILDING LENGTH:	45.3 meters	148.7 feet
MINIMUM BUILDING WIDTH:	22.4 meters	73.6 feet

********** FLOW SECTOR ANALYSIS **********

25 meter receptor spacing: 46. meters - 5000. meters
31 meter receptor spacing: 5031. meters - 8100. meters

FLOW SECTOR	BUILD WIDTH	BUILD LENGTH	XBADJ	YBADJ	MAX 1-HR CONC	DIST (m)	TEMPORAL PERIOD

10	44.67	22.42	-20.92	-6.36	0.5277E-03	75.0	WIN
20	45.31	28.92	-22.92	-7.94	0.6101E-03	50.0	WIN
30	44.58	34.53	-24.22	-9.29	0.7713E-03	46.0	WIN
40	42.48	39.10	-24.79	-10.36	0.8876E-03	46.0	WIN
50	39.10	42.48	-24.60	-11.11	0.9576E-03	46.0	WIN
60	34.53	44.58	-23.66	-11.52	0.9635E-03	46.0	SPR
70	28.92	45.31	-22.01	-11.59	0.9631E-03	46.0	SPR
80	22.42	44.67	-19.68	-11.30	0.7456E-03	46.0	SPR
90	0.00	0.00	0.00	0.00	0.1392E-02	46.0	WIN
100	22.42	44.67	-15.98	-9.71	0.7932E-03	46.0	WIN
110	28.92	45.31	-14.71	-8.46	0.1488E-02	46.0	SPR
120*	34.53	44.58	-12.99	-6.95	0.2183E-02	46.0	SPR
130	39.10	42.48	-10.88	-5.23	0.1803E-02	46.0	SPR
140	42.48	39.10	-8.44	-3.35	0.1803E-02	46.0	SPR
150	44.58	34.53	-5.74	-1.37	0.1462E-02	46.0	SPR
160	45.31	28.92	-2.87	0.65	0.1215E-02	46.0	SPR
170	44.67	22.42	0.09	2.65	0.7484E-03	50.0	SPR
180	42.67	15.24	3.05	4.57	0.6427E-03	75.0	WIN
190	44.67	22.42	-1.50	6.36	0.8302E-03	46.0	SPR
200	45.31	28.92	-6.00	7.94	0.9335E-03	46.0	SPR
210	44.58	34.53	-10.31	9.29	0.1066E-02	46.0	SPR
220	42.48	39.10	-14.32	10.36	0.1170E-02	46.0	SPR
230	39.10	42.48	-17.89	11.11	0.1103E-02	46.0	SPR
240	34.53	44.58	-20.91	11.52	0.1017E-02	46.0	SPR
250	28.92	45.31	-23.30	11.59	0.9283E-03	46.0	SPR
260	22.42	44.67	-24.99	11.30	0.6695E-03	46.0	WIN
270	0.00	0.00	0.00	0.00	0.1392E-02	46.0	WIN
280	22.42	44.67	-28.69	9.71	0.7093E-03	46.0	WIN
290	28.92	45.31	-30.60	8.46	0.7562E-03	46.0	WIN
300	34.53	44.58	-31.58	6.95	0.7824E-03	46.0	WIN
310	39.10	42.48	-31.60	5.23	0.7471E-03	46.0	WIN
320	42.48	39.10	-30.66	3.35	0.6722E-03	46.0	WIN
330	44.58	34.53	-28.79	1.37	0.5650E-03	46.0	WIN
340	45.31	28.92	-26.05	-0.65	0.5140E-03	50.0	WIN
350	44.67	22.42	-22.51	-2.65	0.4925E-03	100.0	WIN
360	42.67	15.24	-18.29	-4.57	0.5213E-03	75.0	WIN

* = worst case flow sector

********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 269.0 / 322.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Desert Shrubland
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Spring

ALBEDO: 0.30
BOWEN RATIO: 3.00
ROUGHNESS LENGTH: 0.300 (meters)

SURFACE FRICTION VELOCITY (U*) ADJUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR	MO	DY	JDY	HR
10	01	03	3	01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
-1.59	0.070	-9.000	0.020	-999.	42.	17.6	0.300	3.00	0.30	0.50

HT	REF TA	HT
10.0	269.0	2.0

WIND SPEED AT STACK HEIGHT (non-downwash): 0.8 m/s
STACK-TIP DOWNWASH ADJUSTED STACK HEIGHT: 6.1 meters
ESTIMATED FINAL PLUME RISE (non-downwash): 0.0 meters
ESTIMATED FINAL PLUME HEIGHT (non-downwash): 6.1 meters

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

YR	MO	DY	JDY	HR
10	01	03	3	01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
-1.59	0.070	-9.000	0.020	-999.	42.	17.6	0.300	3.00	0.30	0.50

HT	REF TA	HT
10.0	269.0	2.0

WIND SPEED AT STACK HEIGHT (non-downwash): 0.8 m/s

STACK-TIP DOWNWASH ADJUSTED STACK HEIGHT: 6.1 meters
ESTIMATED FINAL PLUME RISE (non-downwash): 0.0 meters
ESTIMATED FINAL PLUME HEIGHT (non-downwash): 6.1 meters

********** AERSCREEN AUTOMATED DISTANCES **********

OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
46.00	0.2183E-02	3775.00	0.1673E-04
50.00	0.1540E-02	3800.00	0.1664E-04
75.00	0.1019E-02	3825.00	0.1656E-04
100.00	0.7907E-03	3850.00	0.1647E-04
125.00	0.6696E-03	3875.00	0.1639E-04
150.00	0.5885E-03	3900.00	0.1630E-04
175.00	0.5138E-03	3925.00	0.1622E-04
200.00	0.4402E-03	3950.00	0.1614E-04
225.00	0.3968E-03	3975.00	0.1606E-04
250.00	0.3553E-03	4000.00	0.1598E-04
275.00	0.3162E-03	4025.00	0.1590E-04
300.00	0.2798E-03	4050.00	0.1582E-04
325.00	0.2468E-03	4075.00	0.1574E-04
350.00	0.2175E-03	4100.00	0.1567E-04
375.00	0.1919E-03	4125.00	0.1559E-04
400.00	0.1704E-03	4150.00	0.1552E-04
425.00	0.1523E-03	4175.00	0.1544E-04
450.00	0.1371E-03	4200.00	0.1537E-04
475.00	0.1246E-03	4225.00	0.1529E-04
500.00	0.1141E-03	4250.00	0.1522E-04
525.00	0.1054E-03	4275.00	0.1515E-04
550.00	0.9789E-04	4300.00	0.1508E-04
575.00	0.9148E-04	4325.00	0.1501E-04
600.00	0.8591E-04	4350.00	0.1494E-04
625.00	0.8101E-04	4375.00	0.1487E-04
650.00	0.7663E-04	4400.00	0.1480E-04
675.00	0.7270E-04	4425.00	0.1473E-04
700.00	0.6913E-04	4450.00	0.1467E-04
725.00	0.6587E-04	4475.00	0.1460E-04
750.00	0.6288E-04	4500.00	0.1454E-04
775.00	0.6012E-04	4525.00	0.1447E-04
800.00	0.5757E-04	4550.00	0.1441E-04
825.00	0.5520E-04	4575.00	0.1434E-04
850.00	0.5300E-04	4600.00	0.1428E-04

875.00	0.5096E-04	4625.00	0.1422E-04
900.00	0.4920E-04	4650.00	0.1415E-04
925.00	0.4823E-04	4675.00	0.1409E-04
950.00	0.4730E-04	4700.00	0.1403E-04
975.00	0.4641E-04	4725.00	0.1397E-04
1000.00	0.4557E-04	4750.00	0.1391E-04
1025.00	0.4475E-04	4775.00	0.1385E-04
1050.00	0.4397E-04	4800.00	0.1379E-04
1075.00	0.4322E-04	4825.00	0.1373E-04
1100.00	0.4250E-04	4850.00	0.1368E-04
1125.00	0.4181E-04	4875.00	0.1362E-04
1150.00	0.4114E-04	4900.00	0.1356E-04
1175.00	0.4049E-04	4925.00	0.1351E-04
1200.00	0.3987E-04	4950.00	0.1345E-04
1225.00	0.3927E-04	4975.00	0.1339E-04
1250.00	0.3869E-04	5000.00	0.1334E-04
1275.00	0.3813E-04	5031.00	0.1327E-04
1300.00	0.3759E-04	5062.00	0.1320E-04
1325.00	0.3707E-04	5093.00	0.1314E-04
1350.00	0.3656E-04	5124.00	0.1307E-04
1375.00	0.3607E-04	5155.00	0.1301E-04
1400.00	0.3559E-04	5186.00	0.1294E-04
1425.00	0.3513E-04	5217.00	0.1288E-04
1450.00	0.3468E-04	5248.00	0.1282E-04
1475.00	0.3425E-04	5279.00	0.1276E-04
1500.00	0.3382E-04	5310.00	0.1269E-04
1525.00	0.3341E-04	5341.00	0.1263E-04
1550.00	0.3301E-04	5372.00	0.1257E-04
1575.00	0.3262E-04	5403.00	0.1251E-04
1600.00	0.3224E-04	5434.00	0.1245E-04
1625.00	0.3187E-04	5465.00	0.1239E-04
1650.00	0.3151E-04	5496.00	0.1234E-04
1675.00	0.3116E-04	5527.00	0.1228E-04
1700.00	0.3082E-04	5558.00	0.1222E-04
1725.00	0.3049E-04	5589.00	0.1216E-04
1750.00	0.3016E-04	5620.00	0.1211E-04
1775.00	0.2984E-04	5651.00	0.1205E-04
1800.00	0.2953E-04	5682.00	0.1200E-04
1825.00	0.2923E-04	5713.00	0.1194E-04
1850.00	0.2893E-04	5744.00	0.1189E-04
1875.00	0.2864E-04	5775.00	0.1184E-04
1900.00	0.2836E-04	5806.00	0.1178E-04
1925.00	0.2809E-04	5837.00	0.1173E-04
1950.00	0.2781E-04	5868.00	0.1168E-04
1975.00	0.2755E-04	5899.00	0.1163E-04
2000.00	0.2729E-04	5930.00	0.1157E-04
2025.00	0.2704E-04	5961.00	0.1152E-04
2050.00	0.2679E-04	5992.00	0.1147E-04
2075.00	0.2654E-04	6023.00	0.1142E-04
2100.00	0.2631E-04	6054.00	0.1137E-04

2125.00	0.2607E-04	6085.00	0.1132E-04
2150.00	0.2584E-04	6116.00	0.1128E-04
2175.00	0.2562E-04	6147.00	0.1123E-04
2200.00	0.2540E-04	6178.00	0.1118E-04
2225.00	0.2518E-04	6209.00	0.1113E-04
2250.00	0.2497E-04	6240.00	0.1109E-04
2275.00	0.2476E-04	6271.00	0.1104E-04
2300.00	0.2456E-04	6302.00	0.1099E-04
2325.00	0.2436E-04	6333.00	0.1095E-04
2350.00	0.2416E-04	6364.00	0.1090E-04
2375.00	0.2397E-04	6395.00	0.1086E-04
2400.00	0.2378E-04	6426.00	0.1081E-04
2425.00	0.2359E-04	6457.00	0.1077E-04
2450.00	0.2340E-04	6488.00	0.1072E-04
2475.00	0.2322E-04	6519.00	0.1068E-04
2500.00	0.2305E-04	6550.00	0.1064E-04
2525.00	0.2287E-04	6581.00	0.1059E-04
2550.00	0.2270E-04	6612.00	0.1055E-04
2575.00	0.2253E-04	6643.00	0.1051E-04
2600.00	0.2237E-04	6674.00	0.1047E-04
2625.00	0.2220E-04	6705.00	0.1042E-04
2650.00	0.2204E-04	6736.00	0.1038E-04
2675.00	0.2188E-04	6767.00	0.1034E-04
2700.00	0.2173E-04	6798.00	0.1030E-04
2725.00	0.2158E-04	6829.00	0.1026E-04
2750.00	0.2142E-04	6860.00	0.1022E-04
2775.00	0.2128E-04	6891.00	0.1018E-04
2800.00	0.2113E-04	6922.00	0.1014E-04
2825.00	0.2098E-04	6953.00	0.1010E-04
2850.00	0.2084E-04	6984.00	0.1006E-04
2875.00	0.2070E-04	7015.00	0.1002E-04
2900.00	0.2056E-04	7046.00	0.9986E-05
2925.00	0.2043E-04	7077.00	0.9948E-05
2950.00	0.2029E-04	7108.00	0.9911E-05
2975.00	0.2016E-04	7139.00	0.9873E-05
3000.00	0.2003E-04	7170.00	0.9836E-05
3025.00	0.1990E-04	7201.00	0.9799E-05
3050.00	0.1978E-04	7232.00	0.9762E-05
3075.00	0.1965E-04	7263.00	0.9726E-05
3100.00	0.1953E-04	7294.00	0.9690E-05
3125.00	0.1941E-04	7325.00	0.9654E-05
3150.00	0.1929E-04	7356.00	0.9618E-05
3175.00	0.1917E-04	7387.00	0.9583E-05
3200.00	0.1905E-04	7418.00	0.9547E-05
3225.00	0.1894E-04	7449.00	0.9513E-05
3250.00	0.1882E-04	7480.00	0.9478E-05
3275.00	0.1871E-04	7511.00	0.9443E-05
3300.00	0.1860E-04	7542.00	0.9409E-05
3325.00	0.1849E-04	7573.00	0.9375E-05
3350.00	0.1838E-04	7604.00	0.9342E-05

3375.00	0.1828E-04	7635.00	0.9308E-05
3400.00	0.1817E-04	7666.00	0.9275E-05
3425.00	0.1807E-04	7697.00	0.9242E-05
3450.00	0.1796E-04	7728.00	0.9209E-05
3475.00	0.1786E-04	7759.00	0.9176E-05
3500.00	0.1776E-04	7790.00	0.9144E-05
3525.00	0.1766E-04	7821.00	0.9112E-05
3550.00	0.1756E-04	7852.00	0.9080E-05
3575.00	0.1747E-04	7883.00	0.9048E-05
3600.00	0.1737E-04	7914.00	0.9017E-05
3625.00	0.1728E-04	7945.00	0.8985E-05
3650.00	0.1718E-04	7976.00	0.8954E-05
3675.00	0.1709E-04	8007.00	0.8923E-05
3700.00	0.1700E-04	8038.00	0.8893E-05
3725.00	0.1691E-04	8069.00	0.8862E-05
3750.00	0.1682E-04	8100.00	0.8832E-05

********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	0.2183E-02	0.2183E-02	0.1964E-02	0.1310E-02	0.2183E-03

DISTANCE FROM SOURCE 46.00 meters directed toward 120 degrees

IMPACT AT THE AMBIENT BOUNDARY	0.2183E-02	0.2183E-02	0.1964E-02	0.1310E-02	0.2183E-03

DISTANCE FROM SOURCE 46.00 meters directed toward 120 degrees

Appendix B: CLEANSORB

- Quote # LDR-24349 RASIRC LABLINE 70L 10-31-24
- CLEANSORB LABLINE Series - Product Information and Specifications

CS CLEAN SOLUTIONS, INC.
Exhaust Purification Systems

Quotation For:

Kurt Christian
Facilities and Construction Director
RASIRC
1861 Lefthand Circle
LONGMONT, CO 80501
USA
Telephone: (719) 287-5878
kchristian@rasirc.com

Sales, Engineering & Administrative Office:
1112 N. Main Street
Suite #330
Manteca CA 95336
USA
Tel: +1 510 651 2700
Fax: +1 510 651 2701

Manufacturing:
26 Commerce Drive
Danbury CT 06810
USA
Tel: +1 203 797 8155
Fax: +1 203 797 0414

CS CLEAN SOLUTIONS

Quote # LDR-24349 RASIRC LABLINE 70L 10-31-24

Reference Inquiries to:
Levi Rodriquez
Regional Sales Manager
CS CLEAN SOLUTIONS Inc.
903.944.8931
levi.rodriquez@csclean-usa.com

Submit Order to:
Levi Rodriquez
levi.rodriquez@csclean-usa.com

Prepared by:
Levi Rodriquez

10/31/2024

Item	Quantity	Part Number	Item Description	Unit Price	Total
1	1	A0349-070	**CLEANSORB LABLINE CS070LS System per the Attached Specification:** • CLEANSORB 70 Liter refillable Column with first granulate fill for Hydrazine Gas Abatement. • Mini Absorber **Estimated Capacity: at Standard Temperature & Pressure:** N2H4: 975 liters **Outlet Concentrations:** N2H4 < 0.01 ppm	$59,614	$59,614
2	1	A6895	**SPARE FILLED PROCESS COLUMN** Model CC070SA, 70 L Includes first fill for Hydrazine abatement **Estimated Capacity: at Standard Temperature & Pressure:** N2H4: 975 liters **Outlet Concentrations:** N2H4 < 0.01 ppm **Column refill and maintenance at intervals are not to exceed 24 months**	$18,340	$18,340
			System Start-up and Training		
3	1	START-UP	**Start-up/Commissioning/Training** Please provide 2 weeks minimum notice for scheduling Includes Travel Expenses	$3,500	$3,500

QUOTATION SUBJECT TO THE FOLLOWING GENERAL CONDITIONS

Warranty is valid for a maximum period of 12 months following delivery.

The CLEANSORB COLUMN described in this quotation has been specified according to the process details supplied by RASIRC.

CS CLEAN SOLUTIONS recommends a canister change after 2 years of usage or 90% consumption whichever comes first.

Conditions of payment and delivery:

Prices:
are net
Item 1, 2 – FCA Ismaning, Germany

Condition of payment:
30 days from date of invoice

Estimated Time to Shipment:
12 – 14 weeks after receipt of order

This quotation is valid for 60 days:

CLEANSORB® LABLINE Model CS070LS

Dry bed chemisorber waste gas treatment system. 70 liter absorber column in air-extractable cabinet with safety and monitoring elements.

Specifications:

Specially configured to absorb exhaust gas from an Ion Implant tool so that the following column outlet concentrations are not exceeded until the end of chemisorbent capacity or lifetime*:

(N2, Air) **

System specifications are based on review and approval of the process data which you submitted to us. Please make sure to notify us of any alterations - also during future use of the CLEANSORB system - so that we can review and update the system configuration as necessary.

* Column refill and maintenance by authorized service partner at intervals which are not to exceed 24 months.
** Species shown in brackets are permitted, though not retained by the column.

Max. total volumetric flowrate: 150 slm
Pressure drop at max. volumetric flow: < 500 Pa
Refer to attached Product Information sheets for more detailed information on dimensions, weights, facilities connections and specifications.

System Description:
Powder-coated steel cabinet as enclosure for the absorber column, system electronics and components.
Key-lockable front-side door. Header connection and air intake vent for cabinet extraction. Bolt-holes for anchoring.

CLEANSORB Column, Model CC070SA:

Refillable absorber column and ADR-authorized transport vessel with UN code number. Constructed from corrosion-resistant 316L stainless steel. Ø 400mm, incorporating:

- Integrated ball valves at column inlet and outlet, DN40 ISO-KF

- Hand lever tool for opening and closing of ball valves

- Swagelok® Quick Connect port, Ø 3mm, for gas sampling at column outlet.

Pipework and Components:

Two gas sampling cocks, one each at system inlet and outlet, Swagelok® Quick Connect port, Ø 6mm.

Internal column bypass line, DN40. Opens if over-pressure set-point is exceeded, to route gas past the column.

Inductive "Column in Place" switch.

Endpoint Detection Sensor:

Honeywell MST equivalent type electrochemical gas sensor to indicate when the column has reached its capacity endpoint. Timer-controlled piston pump for gas sampling to endpoint detector. Two selectable sampling points:
1. To detect endpoint prior to gas breakthrough at column outlet (typically at 90 % of column capacity);
2. At column outlet..

Stainless steel operating panel at front of system. Engraved flow chart schematic with colored LEDs to indicate status of valves. Alphanumeric display of system inlet pressure.
Push-button activation of:
- Column bypass operation
- Gas sampling unit

Microprocessor-controlled electronics with LED and buzzer status signals for:
- Mains power
- Bypass Open/Closed
- Inlet Pressure Warning/Alarm
- Column in Place
- Column Capacity Endpoint.

Remote signaling available via:
- volt-free dry contacts
- RS232/RS422.

Key switch with selection of two user authorization levels.

Signal Tower

Configured for use at 115 Volt, Single Phase, 60 Hz supply

Operating manual in English language with customer-specific specifications.

CS Clean Solutions, Inc.
1112 N. Main St #330
Manteca, CA 95336
Phone: + 1 510.651.2700
Fax: + 1 510.651.2702
Email: sales@csclean-usa.com

GENERAL TERMS AND CONDITIONS OF SALE AND DELIVERY

These General Terms and Conditions of Sale and Delivery (these "Terms") are applicable to all U.S. customers (the "Customers" and each, individually, a "Customer") of CS Clean Solutions, Inc. a Nevada Corporation (the "Company").

1 Terms and Conditions of Sale:

1.0 Company shall sell and deliver to Customer and Customer shall purchase and accept from Company the products (herein, the "Products") described on or in any confirmed order, agreement or quotation, or any combination thereof (the "Order"), pursuant to the terms and conditions of the Order and those specified below, which taken together shall constitute the entire agreement between Company and Customer regarding the Products (herein, this "Agreement").

1.2 No other terms or conditions shall be of any effect unless otherwise specifically agreed to by Company in a separate written agreement duly signed by an officer of the Company. Customer will be deemed to have assented to all Terms if any part of the Products is accepted by the Customer. If Customer finds any Term not acceptable, Customer must so notify the Company at once and must reject the Products delivered under this Agreement. Any additional or different terms or conditions contained in Customer's Order or response hereto shall be deemed objected to by Company and shall be of no effect. No general terms and conditions of a Customer shall at any time form a part of the content of any contract or agreement between the Customer and the Company, even if they are not further expressly rejected by the Company.

1.3 Unless otherwise agreed in writing, all quotations for Products shall be subject to change without notice. Subsequent modifications in quantity or quality, if such are requested by Customer, generally will cause a modification of the quoted price. Drawings, samples and technical documentation enclosed with any quotation remain the property of Company. All drawings and samples shall be treated confidentially by Customer and must be returned to Company after usage.

1.4 No Order is binding upon the Company until the earlier of acceptance of the Order in writing or the delivery of the Products to the Customer. Notwithstanding any prior acceptance of an Order by Company, Company shall have no obligation if the Customer is in breach of any of its obligations hereunder, or any other agreement between the Customer and Company, at the time Company's performance was due.

1.5 All verbal agreements concerning the terms of any Order, including agreements made by telephone, shall have no force and effect unless and until acknowledged by the Company in writing.

1.6 Customer shall bear all costs associated with the cancellation or modification of the Order.

2 Prices:

2.1 All price quotations are EX WORKS (EXW, per Incoterms 2000) from the place of business of the Company's parent company: CS Clean Solutions, AG in D-85735 Ismaning Germany, unless stated otherwise on the quotation.

2.2 The price of the Products shall be the Company's current prices in effect from time to time. A price list is available on request.

2.3 Company may, without notice to Customer, increase the price of the Products by the amount of any new or increased tax or duty (excluding franchise, net income and excess profits taxes) which Company may be required to pay on the manufacture, sale, transportation, delivery, export, import or use of the Products or the materials required for their manufacture or which affects the cost of such materials.

3 Terms of Payment:

3.1 Unless otherwise agreed to in writing by the Company, the amount invoiced shall be due and payable within thirty (30) days upon Customer's receipt of the invoice.

3.2 Customer shall make payments by check or wire transfer to the account indicated on the invoice without a cash discount or offset and the Company shall not be required to incur any expense to receive timely payment in full as required by this Agreement.

3.3 Company may, without notice, change or withdraw extensions of credit at any time. If Company ceases to extend credit terms before shipment, Customer's sole remedy shall be cancellation of its order. If Customer does not receive notice before shipment, its sole remedy shall be rejection of the Products immediately upon delivery.

3.4 If the Customer fails to make payment on or before the date required, Customer shall pay interest to the Company at the rate of one and one-half percent (1.5%) per month or such lesser amount permitted by law. The specification or charging of interest shall not be deemed an agreement to extend credit.

3.5 If Customer fails to observe these Terms or the terms of any other agreements between Company and Customer, or if Customer becomes insolvent, all balances then due and owing to the Company shall become due immediately, notwithstanding any agreed upon payment periods. Any Orders that have been confirmed by the Company, but not yet filled, shall in such cases become cancelable at the sole discretion of Company.

3.6 Customer does not enjoy a right of set-off under any circumstances.

4 Delivery Terms:

4.1 Company shall use its reasonable efforts to deliver the Products to Customer on or before the agreed upon delivery date, however, time shall not be of the essence. Except in cases of Company's willful misconduct or gross negligence, Company shall not be liable to Customer for delays in delivery or damage to the Products while in transit, irrespective of whether Company or Customer determined the mode of transportation.

4.2 In cases of deliveries of Products manufactured to Customer's specification ("Special Orders") and unless otherwise agreed to in writing, all tools, models, plans, blueprints or other devices and/or documents used and/or developed by Company (the "Tools") in order to fulfill any Order or Special Order are the property of the Company, even if the cost of development and/or manufacturing of such tools, models, plans, blueprints or other devices and/or documents was wholly or partially borne by the Customer.

5 Security Interest:

5.1 As security for the timely payment and performance of all Customer's indebtedness to Company, Customer hereby grants to the Company a first priority security interest in the Products following delivery thereof to Customer ("Collateral"). Such Interest shall remain in force until payment in full of the entire purchase price for the Products and any other amounts due to the Company by Customer.

5.2 If so requested by Company, Customer shall deliver to Company, in form and substance satisfactory to Company, and duly executed as required by Company, financing statements and other security interest perfection documentation in form and substance satisfactory to Company, duly filed under the UCC in all jurisdictions as may be necessary, or in Company's opinion, desirable, to perfect Company's security interest and lien in the Collateral, to establish, perfect, preserve and protect Company's security interest as a legal, valid and enforceable security interest and lien, and all property or documents of title, in cases in which possession is required for the perfection of Company's security interest.

6. Limitation of Liability:

6.1 IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY INDIRECT, INCIDENTAL, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFITS, REVENUE, GOODWILL OR USE, INCURRED BY CUSTOMER OR ANY THIRD PARTY, WHETHER IN AN ACTION IN CONTRACT, TORT, STRICT LIABILITY, OR IMPOSED BY STATUTE, OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

6.2 NOTWITHSTANDING THE TERMS AND CONDITIONS SET FORTH IN SECTION 6.1., COMPANY'S LIABILITY – WHETHER BASED UPON CONTRACT, TORT, EQUITY, NEGLIGENCE OR ANY OTHER LEGAL CONCEPT – SHALL IN NO EVENT EXCEED THE VALUE OF CUSTOMER'S ORDER, AS DESCRIBED ON THE ORDER FORM, OR THE ORDER VALUE FOR (1) CALENDAR YEAR, WHICHEVER AMOUNT IS LOWER. IT IS AGREED AND ACKNOWLEDGED THAT THE PROVISIONS OF THIS AGREEMENT ALLOCATE THE RISKS BETWEEN COMPANY AND CUSTOMER, THAT COMPANY'S PRICING REFLECTS THIS ALLOCATION OF RISK, AND BUT FOR THIS ALLOCATION AND LIMITATION OF LIABILITY, COMPANY WOULD NOT HAVE ENTERED INTO THIS AGREEMENT.

6.3 IN JURISDICTIONS THAT LIMIT THE SCOPE OF OR PRECLUDE LIMITATIONS OR EXCLUSION OF REMEDIES OR DAMAGES, OR OF LIABILITY, SUCH AS LIABILITY FOR GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OR DO NOT ALLOW IMPLIED WARRANTIES TO BE EXCLUDED, THE LIMITATION OR EXCLUSION OF WARRANTIES, REMEDIES, DAMAGES OR

LIABILITY SET FORTH ABOVE ARE INTENDED TO APPLY TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW. CUSTOMER MAY ALSO HAVE OTHER RIGHTS THAT VARY BY STATE, COUNTRY OR OTHER JURISDICTION.

7 **Force Majeure:**
7.1 Company shall not be liable to Customer or any other person for any failure or delay in the performance of any obligation under this Agreement due to events beyond its reasonable control, including, but not limited to, fire, storm, flood, earthquake, explosion, accident, acts of the public enemy, wars, riots and public disorder, sabotage, strikes, lockouts, labor disputes, labor shortages, work slowdown, stoppages or delays, shortages or failures or delays of energy, materials, supplies or equipment, transportation embargoes or delays, acts of God, breakdown in machinery or equipment, and, except as otherwise set forth in this Agreement, acts or regulations or priorities of the federal, state or local governments.

7.2 Customer shall not be liable to Company or any other person for any failure or delay in the performance of any obligation under this Agreement due to events beyond its reasonable control, including, but not limited to, fire, storm, flood, earthquake, explosion, accident, acts of the public enemy, wars, riots and public disorder, sabotage, strikes, lockouts, labor disputes, labor shortages, work slowdown, stoppages or delays, shortages or failures or delays of energy, materials, supplies or equipment, transportation embargoes or delays, acts of God, breakdown in machinery or equipment, and, except as otherwise set forth in this Agreement, acts or regulations or priorities of the federal, state or local governments.

7.3 When the event operating to excuse performance by either party shall cease, this Agreement shall continue in full force until all deliveries have been completed.

8 **Miscellaneous Terms:**
8.1 This Agreement and all claims arising out of or related to this Agreement, including tort claims, shall be governed by and construed in accordance with the laws of the State of California without giving effect to any choice or conflict of law provision or rule that would cause the application of the laws of any jurisdiction other than California. The application of the Convention on Contracts for the International Sale of Goods (CISG) is hereby excluded.

8.2 Any controversy or claim arising out of or relating to this Agreement, or the negotiation or breach thereof, shall be exclusively settled by arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("AAA"). The award shall be final and binding. Judgment upon the award rendered by the arbitrator or the arbitrators may be entered in any court having jurisdiction thereof. The arbitration shall be held in New York, New York, and shall be conducted (i) if the amount in dispute is less than two hundred fifty thousand dollars ($250,000), before a single arbitrator mutually agreeable to Company and Customer, or if no agreement can be reached, then selected by the AAA, or (ii) if the amount in dispute is two hundred fifty thousand dollars ($250,000) or more, before three (3) arbitrators. The arbitrator(s) shall make detailed findings of fact and law in writing in support of his, her or their decision, and shall award reimbursement of attorney's fees and other costs of arbitration to the prevailing party, in such manner as the arbitrator shall deem appropriate. In addition, the losing party shall reimburse the prevailing party for reasonable attorneys' fees and disbursements, the costs of the arbitration (including but not limited to the fees and expenses of the arbitrator and expert witnesses) and the costs incurred by the prevailing party in successfully seeking any preliminary equitable relief or judicially enforcing any arbitration award.

8.3 If any provision contained in this Agreement is held by final judgment of a court of competent jurisdiction to be invalid, illegal or unenforceable, such invalid, illegal or unenforceable provision shall be severed from the remainder of this Agreement, and the remainder of this Agreement shall be enforced. In addition, the invalid, illegal or unenforceable provision shall be deemed to be automatically modified, and, as so modified, to be included in this Agreement, such modification being made to the minimum extent necessary to render the provision valid, legal and enforceable. Notwithstanding the foregoing, however, if the severed or modified provision concerns all or a portion of the essential consideration to be delivered under this Agreement by one party to the other, the remaining provisions of this Agreement shall also be modified to the extent necessary to equitably adjust the parties' respective rights and obligations hereunder.

8.4 In the event of a violation or threatened violation of Company's proprietary rights, Company shall have the right, in addition to such other remedies as may be available pursuant to law or this Agreement, to temporary or permanent injunctive relief enjoining such act or threatened act. The parties acknowledge and agree that legal remedies for such violations or threatened violations are inadequate and that Company would suffer irreparable harm.

8.5 The parties hereto are independent contractors and nothing in this Agreement will be construed as creating a joint venture, employment or agency relationship between the parties.

8.6 This Agreement shall apply to all sales of the Products to Customer.

8.7 This Agreement, including any Schedules attached hereto, contains the entire agreement of the parties with respect to the subject matter of this Agreement, and supersedes all prior agreements between them, whether oral or written, of any nature whatsoever with respect to the subject matter hereof. This Agreement is binding upon the parties hereto, their successors and permitted assigns.

MANUFACTURER'S REPRESENTATIONS AND LIMITED WARRANTIES

The product has been manufactured and tested to the highest quality standards by CS CLEAN SOLUTIONS. This Limited Warranty offered by CS CLEAN SYSTEMS covers defects in material or workmanship in new CS CLEAN SYSTEMS products. This warranty extends to the original purchaser only and is non-transferable. Only consumers purchasing CS CLEAN SYSTEMS products from authorized CS CLEAN SYSTEMS representative may obtain warranty coverage under the limited warranties.

1 **Warranty and Limitations:**
1.1 Company warrants solely to the original purchaser of the Products that for the Warranty Period (as defined below), the Products will be free from defects in materials and workmanship under normal use, and will conform to Company's published specifications of the Products. Notwithstanding the foregoing, Company retains its right to deviate from its published specifications due to the latest innovations and improvements in function and design of the Products. The foregoing warranty is subject to the proper storage, transportation and use of the Products, and does not include defects due to normal wear and tear or deterioration, improper maintenance, misuse, abuse, negligence, accident or alteration

1.2 Customer shall immediately, but in any event, no later than ten (10) days following delivery, inspect the Products for conformity and visible defects. Customer shall give Company immediate written notice of any non-conformities or visible defects regarding the Products and contact the Company in writing concerning return or repair as the case may be. In the event the Customer fails to provide the Company within (10) days following delivery with notice any non-conformities or visible defects, any warranty claims in this regard shall be deemed waived. Limited warranties are void if product is returned with removed, damage or tampered labels, parts or any alterations (including removal of any component or external part)

1.2.1 Customer if notify by Company to return product to a designated location for repair or replacement must request a Return Authorization Number (RAN) to use when returning product (reference Section 1.8 for contact information). Delivery of the product to Company will be shipped pre-paid by Customer and return delivery to Customer will be pre-paid by Company unless otherwise agreed to by parties.

1.3 Customer shall notify Company in writing of any defects of the Products. Company's sole obligation under the foregoing warranty is, at Company's option, to repair or correct any such covered defect or to replace or exchange the Product. Any repaired, corrected, replaced or exchanged Products shall be subject to the warranty set forth in 1.1., following their repair, correction, replacement or exchange. If Company has received notification from Customer, and no defects of the Product could be discovered, Customer shall bear the costs that Company incurred as a result of the notice. Notification should be given in accordance with Section 1.8.

1.4 With respect to orders made to custom, any defects of the Products caused by Customer's specifications are excluded from the warranty set forth in 1.1.

1.5 Company also makes no warranty that the Products manufactured under an order made to custom do not infringe the intellectual property or other proprietary rights of any third party and Customer is solely responsible for assuring that such Products do not so infringe.

1.6 The "Warranty Period" begins on the documented date on which the Products are being physically delivered to Customer's site, and continues to be in effect for twelve (12) months.

1.7 Company does not authorize any person or party to assume or create for it any other obligation or liability in connection with the Products except as set forth herein.

1.8 All requests and notices under this Warranty shall be directed to:

CS Clean Solutions, Inc.
Attention Of: Customer Support
1112 N. Main St #330 Manteca, CA 95336 United States of America.
Phone: + 1 510.651.2700 Fax: +1 510.651.2702 E-mail: sales@csclean-usa.com

1.9 THE WARRANTY SET FORTH IN SECTION 1.1 IS MADE IN LIEU OF ALL OTHER WARRANTIES (WHETHER EXPRESS OR IMPLIED), RIGHTS OR CONDITIONS, AND CUSTOMER ACKNOWLEDGES THAT EXCEPT FOR SUCH LIMITED WARRANTY, THE PRODUCTS ARE PROVIDED "AS IS." COMPANY SPECIFICALLY DISCLAIMS, WITHOUT LIMITATION, ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OF ANY KIND, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, AND THOSE WARRANTIES ARISING FROM A COURSE OF PERFORMANCE, A COURSE OF DEALING OR TRADE USAGE.

2 Limitation of Liability:

2.1 IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY INDIRECT, INCIDENTAL, PUNITIVE, SPECIAL ORCONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFITS, REVENUE, GOODWILL OR USE, INCURRED BY CUSTOMER OR ANY THIRD PARTY, WHETHER IN AN ACTION IN CONTRACT, TORT, STRICT LIABILITY, OR IMPOSED BY STATUTE, OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. COMPANY'S LIABILITY FOR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PRODUCTS. IT IS AGREED AND ACKNOWLEDGED THAT THE PROVISIONS OF THIS AGREEMENT ALLOCATE THE RISKS BETWEEN COMPANY AND CUSTOMER, THAT COMPANY'S PRICING REFLECTS THIS ALLOCATION OF RISK, AND BUT FOR THIS ALLOCATION AND LIMITATION OF LIABILITY, COMPANY WOULD NOT HAVE ENTERED INTO THIS AGREEMENT.

2.2 IN JURISDICTIONS THAT LIMIT THE SCOPE OF OR PRECLUDE LIMITATIONS OR EXCLUSION OF REMEDIES OR DAMAGES, OR OF LIABILITY, SUCH AS LIABILITY FOR GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OR DO NOT ALLOW IMPLIED WARRANTIES TO BE EXCLUDED, THE LIMITATION OR EXCLUSION OF WARRANTIES, REMEDIES, DAMAGES OR LIABILITY SET FORTH ABOVE ARE INTENDED TO APPLY TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW. CUSTOMER MAY ALSO HAVE OTHER RIGHTS THAT VARY BY STATE, COUNTRY OR OTHER JURISDICTION.

CS CLEAN SOLUTIONS

Product Information and Specifications

CLEANSORB® LABLINE Series

Models: CS025LS, CS070LS

Controlled product information. Intended use: technical reference for quotations and similar customer projects. Not intended for general distribution or for advertising purposes.

Rev. 2021-07-01-en

CLEANSORB® Service and Support

- High quality refillable stainless steel absorber columns ADR/ DOT approved for chemical road transport
- Worldwide network of local service partners for column refill and associated logistics
- Service contracts for annual preventive and general on-site maintenance

CLEANSORB® Dry Bed Chemisorber Technology

- Safe conversion of hazardous gases to stable solids at ambient temperature
- Unsurpassed gas removal to ppm levels and below
- Passive operating principle, does not require electricity, heating, etc.
- Low facilities requirement, inexpensive installation, simple to operate
- No hidden costs for 3ph power, fuel lines, D.I. water or acid drain
- Low maintenance: no specialized on-site service personnel required
- Gas bound in dry, compact form: not transferred to waste water

CLEANSORB® LABLINE Series

The CLEANSORB® LABLINE features a small absorber column housed in a compact, air-extracted cabinet.

The ability to passively chemisorb hazardous gases at ambient temperature is a particular advantage for sporadic laboratory work since the LABLINE is permanently on ready and does not have to be heated up or otherwise activated each time a new experiment is to be run.

The wide selectivity of CLEANSORB® chemisorber media to a diverse list of gases and liquid precursors, ranging from corrosive or toxic species to latest-generation metalorganic complexes, offers ideal flexibility for R&D requirements. The LABLINE system is also commonly used to abate hazardous purge gases from the venturi vacuum generator exhaust lines of one or several gas supply cabinets.

A front control panel allows the user to interact with the system and displays a readout of important operating conditions such as inlet pressure and the status of the capacity endpoint detector. On power-up, the system performs a self-test routine to verify the integrity of sensors and cable connections. Volt-free contacts and a digital interface are provided for remote monitoring and interlocking of warning and alarm signals.

Important!

Our products are configured and specified on the basis of the process data provided in written form by you. These process details are taken to be accurate and complete. Future alterations to these process details must first be clarified with CS CLEAN SOLUTIONS AG prior to further operation of the products.

Before requesting a system recommendation or quotation, please ask your authorized CS CLEAN SOLUTIONS sales and service partner to provide you with a Process Definition sheet so that we can recommend a model and configuration which is optimized for your process.

Unless otherwise agreed upon in writing, the warranty on newly-manufactured products is for a period of 12 months following shipment. It does not extend to consumables, parts which are subject to wear or adverse climatic conditions, or components exposed to corrosive media.

Available Models	Column Size
CLEANSORB® LABLINE CS025LS	25 liter
CLEANSORB® LABLINE CS070LS	70 liter

Basic System Configuration

Housing	Powder-coated steel cabinet as enclosure for the absorber column, system electronics and components. Key-lockable front-side door. Header connection and air intake vent for cabinet extraction. Bolt-holes for anchoring. Inlet and outlet connections: ISO-KF flanges. (CS025LS: DN 25mm; CS070LS: DN 40 mm, refer to drawings below).
Absorber Column	Refillable absorber column and ADR-authorized transport vessel with UN code number. Constructed from corrosion-resistant 316L stainless steel incorporating: - Integrated ball valves at column inlet and outlet, ISO-KF flanges - Hand lever tool for opening and closing of ball valves - Quick Connect port, Ø 3mm, for gas sampling at column outlet. **Model CS025SA:** Mounted on cylindrical socket (without caster wheels) **Model CS070SA:** Mounted on detachable caster wheels

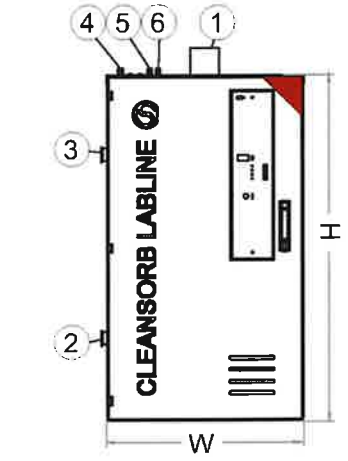
Pipework and Components	316L stainless steel piping and flexible steel bellows. (CS025LS: DN 25 mm; CS070LS: DN 40 mm). Pressure transducer, -500 to +500 mbar. To monitor pressure at inlet to column. Two gas sampling cocks, one each at system inlet and outlet, Quick Connect port, Ø 6mm. Internal relief line. Opens if over-pressure set-point is exceeded, to route gas past the column. Inductive "Column in Place" switch.
Endpoint Detection	Electrochemical gas sensor to indicate when the column has reached its capacity endpoint. Timer-controlled piston pump for gas sampling to endpoint detector. Two selectable sampling points: 1. To detect endpoint prior to gas breakthrough at column outlet (typically at 90 % of column capacity); 2. At the outlet of the main column. Note: The purpose of the column endpoint detector is to signal end of column lifetime only. If gas concentrations at the outlet of the CLEANSORB system are to be monitored for safety purposes, it is expected that a separate gas detection system be installed for this dedicated purpose.
Operating Panel and Controls	Stainless steel operating panel at front of system. Engraved flow chart schematic with colored LEDs to indicate status of valves. Alphanumeric display of system inlet pressure. Push-button activation of: - Column bypass operation - Gas sampling unit. PLC-controlled electronics with LED and buzzer status signals for: - Mains power - Relief Line Open/ Closed - Inlet Pressure Warning/Alarm - Column in Place - Column Capacity Endpoint. Remote signaling available via: - volt-free dry contacts - RS232 Key switch with selection of two user authorization levels.
Documentation	Operating manual in English or German language with customer-specific specifications.

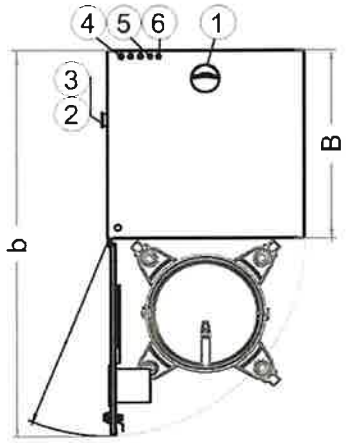
Available Options

Column Relief Line	**Mini-Absorber Cartridge** Integrated into Relief Line, for short-term containment of gas release during column bypass operation.
Ex-compliant components	Gas wetted components and sensors ex-compliant.
Power Supply	**120 VAC/ 60 Hz/ 1-Phase (UL).** Cables and components compliant with UL standards. (Single phase, grounded midpoint, 3 wire).
	230 VAC/ 50 Hz/ 1-Phase (CE); (Single phase, L, N, PE).
	120 VAC/ 60 Hz/ 1-Phase (CE); (Single phase, L, N, PE).
	230 VAC/ 50 Hz/ 1-Phase (UL); (Single phase, grounded midpoint, 3 wire).
Signal Tower Options	**Signal Tower – Local** Signal tower for indication of system status, warning and alarm states. Light stack with green, amber and red LEDs. Roof-mounted on cabinet.
	Signal Tower - Remote Signal tower for indication of system status, warning and alarm states. Light stack with green, amber and red LEDs. Supplied with 30 m cable for remote installation. The remote signal tower is connected via the volt-free contacts, making these unavailable for further use. If the remote signal tower is connected, the RS232 serial interface should be used for external communication.
Facilities Connections (N2, CDA)	Select either Metric (mm), or Imperial (inch).
Gas Inlet and Outlet Connections	(As viewed from front of cabinet), select either: Inlet and outlet on **left** side Inlet and outlet on **right** side
Units on operating panel	Pressure displayed in either: mbar, hPa or psi. (select one).

System Specifications

Series	CLEANSORB® LABLINE
Models	CS025LS, CS070LS





1 Connection for cabinet air extraction

Ø 100 mm; required negat. pressure > 0.1 mbar (0.04 inch w.c.) or flow > 100 m3/h (58 cfm)

2 System inlet connection

DN25 ISO-KF (CS025LS), DN40 ISO-KF (CS070LS)
total vol. flowrate, incl. inert carrier/pump/dilution gases:
< 70 slm (CS025LS), < 150 slm (CS070LS)
concentr. of treated gases (corrosive/toxic/pyrophoric) typ. < 2 %;
further permitted gases: dry inert gas;
Note: no moisture, no ambient air!
-100 hPa...+100 hPa, 5...40 °C (41...104 °F)
Conditions need to be clarified in advance with the manufacturer.

3 System outlet connection

DN25 ISO-KF (CS025LS), DN40 ISO-KF (CS070LS)
total vol. flowrate: < 70 slm (CS025LS), < 150 slm (CS070LS)
5...70 °C (41...158 °F)
~ -500 Pa (-0.07 psi) relative to pressure at system inlet required

4 Power

Single phase, 50/60 Hz, 10 A supply fuse (on site),
120 VAC (max. consumpt. 1 A) or 230 VAC (max. consumpt. 0.5 A)

5 Purge gas supply

6 mm or ¼"; 6...7 bar (85...100 psi); flow during purge: 35 slm;
Nitrogen 2.8 or better

6 Pneumatic supply

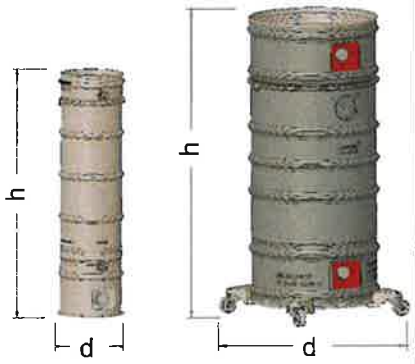
6 mm or ¼"; 6...7 bar (85...100 psi); Nitrogen 2.8 or better

Model	H	W	B	b
CS025LS	1250 mm (49.2 in)	560 mm (22.0 in)	560 mm (22.0 in)	1130 mm (44.5 in)
CS070LS	1250 mm (49.2 in)	700 mm (27.6 in)	700 mm (27.6 in)	1412 mm (55.6 in)

Gross weight (cabinet)	max. 95 kg (209.4 lb) for CS025LS max. 115 kg (253.5 lb) for CS070LS

Anchoring of the Cabinet

Location of anchoring points	bolts can be set in at the four corners, bottom of cabinet
Heavy-duty anchors	tractive force >= 270 kg (595 lb) per anchor
Bolts	max. Ø 12 mm (~ ½ in)
Washer	outer Ø 70 mm (~ 2¾ in); thickness 6 mm (~ ¼ in)



CC025SA CC070SA

Column	h	d	D	weight
CC025SA for CS025SA	955 mm (37.6 in)	260 mm (10.2 in)	240 mm (9.4 in)	max. 68 kg (150 lb)
CC070SA for CS070SA	1100 mm (43.3 in)	650 mm (25.6 in)	400 mm (15.7 in)	max. 135 kg (297 lb)

Pressure drop at max. volumetric flow	max. 500 Pa (0.07 psi)
Gas sampling port	Ø 3 mm self-closing quick connect

Storage Conditions of Absorber Columns

- dry and clean
- temperature range 5...25 °C (41...77 °F)
- relative humidity max. 80 % (non-condensing)
- protected from one-sided heat and direct sunlight
- upright standing
- protected from unauthorized access
- store used absorber columns spatially separated from newly-filled absorber columns

On-site Conditions for System Operation

Temperature range	5 ... 35 °C (41 ... 95 °F)
Humidity	80 % relative humidity (non-condensing!)
Installation site	indoors; lighting > 270 lux, mechanical ventilation
Altitude	max. 1000 m (3280 ft) above sea level
Floor space	load-bearing, level and even (installation and work/maintenance area must not exceed a max height difference of 3 mm; see also DIN 18202, tab. 3, line 4)

Contact the manufacturer CS CLEAN SOLUTIONS AG, if different specifications are required.

Computer interfaces

Interface type	RS232 (3-wire), alternatively RS422 (4-wire); ASCII protocol
External port	D-SUB 9-pin miniature female connector
Internal port	port for coded flat cable; use shielded 4-pin twisted-pair-cable
Usage	on-site maintenance, system diagnosis, interface to central monitoring unit (further information on request)

Volt-free Contacts for External Evaluation

Outlets	external evaluation is possible for up to 4 signals via relais outlets KO1...KO4; KO1: PRESSURE WARNING KO3: BYPASS OPEN KO2: PRESSURE ALARM KO4: ENDPOINT DETECTED during error status contacts are open
Specification	max. 24 VDC, max. 0.4 A
Usage	signals for central monitoring unit, signal tower or remote display

CS CLEAN
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ATTACHMENT "I" – HAZARDOUS MATERIALS AND WASTE MANAGEMENT PLAN

Hazardous Materials and Waste Management Plan

for

RASIRC Imperial Project

Prepared by

J. Kevin Selby
Head of Manufacturing;
Director – Environmental, Health, and Safety
RASIRC, Inc.

11/6/2024 Imperial County (Approval)
6/10/2025 California Department of Toxic Substances Control (Review)

Preface – June 2025 Update

This Hazardous Materials and Waste Management Plan (HMWMP) was originally developed and submitted as part of the permitting package for the RASIRC Imperial facility. The plan was reviewed and accepted by the Imperial County Certified Unified Program Agency (CUPA) in 2024 as meeting applicable state and local requirements for hazardous materials and waste management under the California Environmental Reporting System (CERS).

Following DTSC's independent review of the Mitigated Negative Declaration (MND) for the RASIRC Imperial facility (State Clearinghouse No. 2025041465), issued in April 2025, the Department issued additional written comments dated June 3, 2025. In response to DTSC's specific requests, this revised version of the HMWMP incorporates supplemental details and clarifications in the following key areas:

- Waste characterization methodology
- Engineering confirmation of enclosed processing environments
- Facility-wide and process-specific secondary containment systems
- Construction details for hazardous material and waste storage structures

This update is provided to ensure consistency with DTSC expectations and to support final agency coordination ahead of the upcoming Imperial County Planning Commission hearing. All new content directly addressing DTSC feedback is clearly identified within the relevant sections of this document.

RASIRC remains committed to full transparency and regulatory alignment at every stage of the permitting and construction process.

Introduction and Purpose

Purpose

This Hazardous Materials and Waste Management Plan provides a structured approach to managing hazardous substances and wastes, ensuring safety, regulatory compliance, and environmental protection at the facility. Each section of the plan aligns with CUPA requirements, supporting regular inspections, employee training, emergency preparedness, and responsible waste disposal practices. It aims to protect employees, the public, and the environment from potential hazards.

Scope

This plan is applicable to all employees, contractors, and visitors who handle or are exposed to hazardous materials and associated hazardous waste at the RASIRC Imperial facility.

Regulatory Framework

CUPA Program Compliance

This plan complies with California Health and Safety Code requirements, including the Hazardous Materials Business Plan (HMBP), California Environmental Reporting System (CERS), Small Quantity hazardous waste generator requirements, and spill prevention protocols.

Other Applicable Regulations

The RASIRC Imperial Hazardous Materials and Waste Management plan complies with OSHA, EPA, DTSC (Department of Toxic Substances Control), and Imperial County CUPA agency requirements.

Facility Identification and Chemical Inventory

Facility Information

Name: RASIRC

Address: The RASIRC Imperial facility is located at GPS coordinates 32.90959271996148, -115.51144045909557, near the city of Brawley.

Facility EPA ID number: **PENDING (EPA ID number has been requested)**

Point of contact:

J. Kevin Selby
Head of Manufacturing; Director – EHS
858-902-9258
kselby@rasirc.com

Chemical Inventory

The RASIRC Imperial facility will annually update its inventory of all hazardous materials in the California Environmental Reporting System (CERS). All Safety Data Sheets (SDS) shall also be reviewed on an annual basis. In addition, the chemical

inventory will be provided to the Imperial County Fire Department as conditions warrant but at a minimum, on an annual basis.

The plan will include:

Hazardous Materials: Description, storage quantities, and locations (e.g., hydrazine, nitrogen).

Hazardous Waste: Types of waste generated, including waste codes and quantities.

Facility Layout Maps: Detailed facility layout diagrams (see Appendix B: Facility Layout) indicating chemical storage/usage locations, name of chemicals, physical state, volume, and NFPA designations.

Enclosed Work Environment Documentation (Added in response to DTSC Comment #2a)

DTS Comment #2a: "*Include documentation and engineering drawings to confirm the enclosed work environment.*"

Facility drawings, including floorplans and ventilation system layouts, confirm that hazardous chemical handling and purification operations will occur in enclosed, negatively pressurized rooms with dedicated exhaust scrubbers and abatement systems. (see Appendix A: Process Flow Diagram). These areas are:

- Isolated from non-process zones
- Monitored for air integrity and pressure differentials
- Documented in various reports and studies submitted with permit applications and CUP conditions precedent requirements.
    - Conditional Use Permit No. 24-0024, Initial Study No. 24-0034 (September 3. 2024)
    - Emergency Response Action Plan (ERAP) (November 5, 2024)
    - Air Quality Analysis Report (December 6, 2024)
    - Health Risk Assessment Report (June 6, 2025)

Hazardous Materials Storage and Handling Procedures

Storage Requirements

All storage of hazardous materials will be in designated areas equipped with secondary containment.

All chemical storage areas shall be well-ventilated, temperature-controlled, fire protected, and properly labeled.

DTS Comment #2b: *"Clarify if there is a secondary containment system around the building and critical process areas. These containment systems should be capable of capturing Hydrazine or its byproducts in the event of a spill, leak, or structural failure to prevent environmental contamination."*

Secondary containment extends beyond individual containers to include process rooms and outdoor chemical handling areas:

- Indoor process areas are coated with chemical-resistant epoxy and feature bermed perimeters with trench drains to capture spills and fire sprinkler water in accordance with California Building Code's H2 Occupancy.
- Spill volumes up to 110% of the largest container volume are accounted for.

Handling Procedures

All facility personnel shall be trained in safe handling practices for each type of hazardous material. See Employee Training section of this document for more detailed information.

All employees, contractors, and visitors shall wear appropriate personal protective equipment (PPE) (e.g., gloves, goggles, respirators) as specified in the chemical SDS information.

Spill Prevention

The RASIRC Imperial facility shall have spill containment systems, such as berms and spill pallets, around storage areas. Spill response kits (e.g., absorbents, containers, etc.) will be in all areas where the potential for a chemical release could occur. Employees will be trained in spill containment and response procedures.

DTSC Comment #2c: *"Elaborate construction details on the external buildings where the purified Hydrazine will be stored. Protection of the sub-soil should be*

done through a secondary containment to prevent any potential spills/leaks from leaching into the soil. "

Hazardous waste and unrefined hydrazine will be housed in commercially available prefabricated storage structures specifically rated for flammable materials. These units are equipped with built-in secondary containment and will be installed on an engineered concrete pad adjacent to the main building. A specification data sheet for one such unit is attached for reference. (see Appendix C: Storage Unit Datasheet).

The external hazardous waste storage structure is engineered to prevent soil contamination:

- Built with reinforced, sealed concrete flooring and integrated curb berms
- Lined with an impermeable chemical-resistant coating
- Fully covered and lockable
- Periodically inspected for signs of cracks, wear, or seepage
- Designed to capture and contain leaks or spills from hydrazine-containing waste

Regular documented inspections of containers and secondary containment systems for signs of wear or leaks shall be performed.

Hazardous Waste Management

Waste Classification

Hydrazine, a highly toxic and reactive chemical, is classified as hazardous waste due to its potential to harm human health and the environment. The specific waste classification depends on the regulatory framework in use, but generally:

U.S. EPA (RCRA): In the United States, under the Resource Conservation and Recovery Act (RCRA), hydrazine is classified as a hazardous waste if it meets certain criteria (e.g., ignitability, toxicity, corrosivity, or reactivity). It is often listed under the "P-list" (P068) or "U-list" if it is unused but discarded.

UN Classification: Hydrazine is typically classified as a Class 8 corrosive material and may also be a Class 6.1 toxic substance, depending on its concentration.

Globally Harmonized System (GHS): Hydrazine is classified as acutely toxic (Acute Tox. 3) and is a carcinogen (Carc. 1B), corrosive to metals, and harmful to aquatic life.

Waste Characterization Methods (Added in response to DTSC Comment #1)

DTSC Comment #1: "*Section 10 "Description of Project" of the MND states: "The purified hydrazine is trademarked as Brute ® Hydrazine. Hazardous waste will be collected and properly disposed of by a licensed third-party company." Please elaborate on the proposed waste characterization methods and include them in future environmental documents*."

Hazardous wastes will be characterized using a combination of generator knowledge and analytical testing methods in accordance with U.S. EPA SW-846 guidelines. Characterization includes:

- Identification of waste based on process knowledge
- Verification through sampling and lab analysis for key parameters (pH, ignitability, reactivity, etc.)
- Classification under RCRA and applicable California waste codes

Documentation of all characterization decisions and supporting data will be retained and made available during inspections or upon regulatory request.

Storage and Labeling

Only DOT-approved containers will be used for hazardous waste storage, with all applicable labeling on the containers and storage location.

The RASIRC Imperial hazardous waste will be stored in a designated, secure area adjacent to the main building. The structure will be covered and provided with proper secondary containment.

Accumulation Time Limits

Based upon expected hazardous waste The RASIRC Imperial facility has been designated as a Small Quantity Generator. The accumulation window is 180 days, but the actual accumulation span will be significantly less.

Waste Minimization

Where feasible, the RASIRC Imperial facility will implement hazardous waste reduction initiatives in accordance with state and local hazardous waste regulations.

Emergency Response and Spill Contingency

Spill Response Procedures

In the event of a spill, the facility Emergency Coordinator shall be immediately notified and efforts to contain the spill using absorbents and neutralizing agents will be initiated.

Personnel shall be evacuated as necessary.

The RASIRC Imperial Emergency Response Action Plan (ERAP) will be activated for spills that exceed any agency reportable limits and/or pose an imminent threat to employees, the facility, or the environment.

Spill Reporting

Timely reporting ensures appropriate response actions are taken to mitigate hazards to human health and the environment.

If a chemical release exceeds the reportable quantities established by the Certified Unified Program Agency (CUPA), immediate notification shall be made to the following agencies:

California Office of Emergency Services (Cal OES): (800)-852-7550.

California Office of Emergency Services

Imperial County CUPA: (760) 352-0381

IC PhD

Imperial County Environmental Health Division: (442) 265-1888

National Response Center (NRC): If the release exceeds federal reportable quantities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): (800)-424-8802

California Office of Emergency Services

Additionally, if the release poses an immediate threat to public health or safety, 911 will be called to alert local emergency responders.

Emergency Equipment

Adequate and appropriate spill response kits, PPE, and fire suppression equipment shall be readily available on-site.

A list of all facility emergency equipment and their location in the facility shall be included in the Chemical Inventory report provided to the Imperial County Fire Department.

Employee Training

Training Program

All employees handling hazardous materials and waste shall undergo initial and annual refresher training.

Training topics include hazard communication, proper handling and storage, emergency response, and spill containment procedures.

Recordkeeping

All training sessions, including training dates, employee names, and topics covered shall be maintained for a minimum of three years.

Inspections and Recordkeeping

Routine Inspections

Weekly inspections of hazardous material and waste storage areas shall be conducted. Inspections shall document findings and any corrective actions taken.

Recordkeeping

Accurate records of waste generation, disposal, and associated manifests shall be maintained in compliance with CUPA requirements. Records shall be maintained for three years and digitally accessible to facilitate agency inspections.

Waste Disposal and Transport

Approved Vendors

The RASIRC Imperial facility shall use only licensed hazardous waste transporters and disposal facilities to ensure compliance with all applicable federal, state, and local hazardous waste disposal regulations.

Manifesting

Hazardous waste disposal manifests shall be completed and maintained for every shipment of hazardous wastes. These manifests shall ensure that facility hazardous waste is transported and disposed of according to regulatory requirements.

Plan Review and Updates

Annual Review

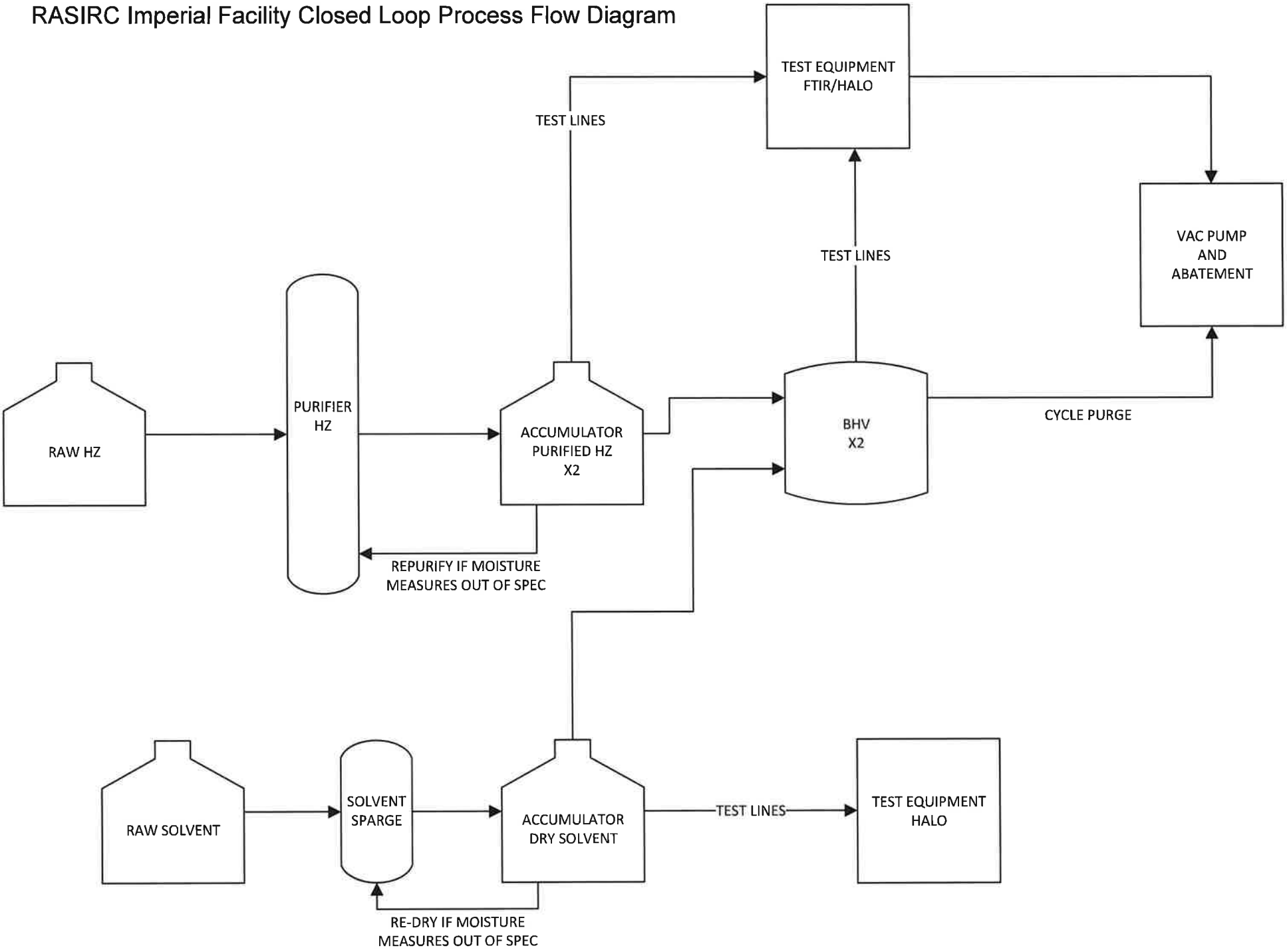
The RASIRC Imperial Hazardous Materials and Waste Management Plan shall be reviewed and updated annually, or as necessary, when operational changes, regulatory updates, or after any significant incident occurs.

CUPA Notification

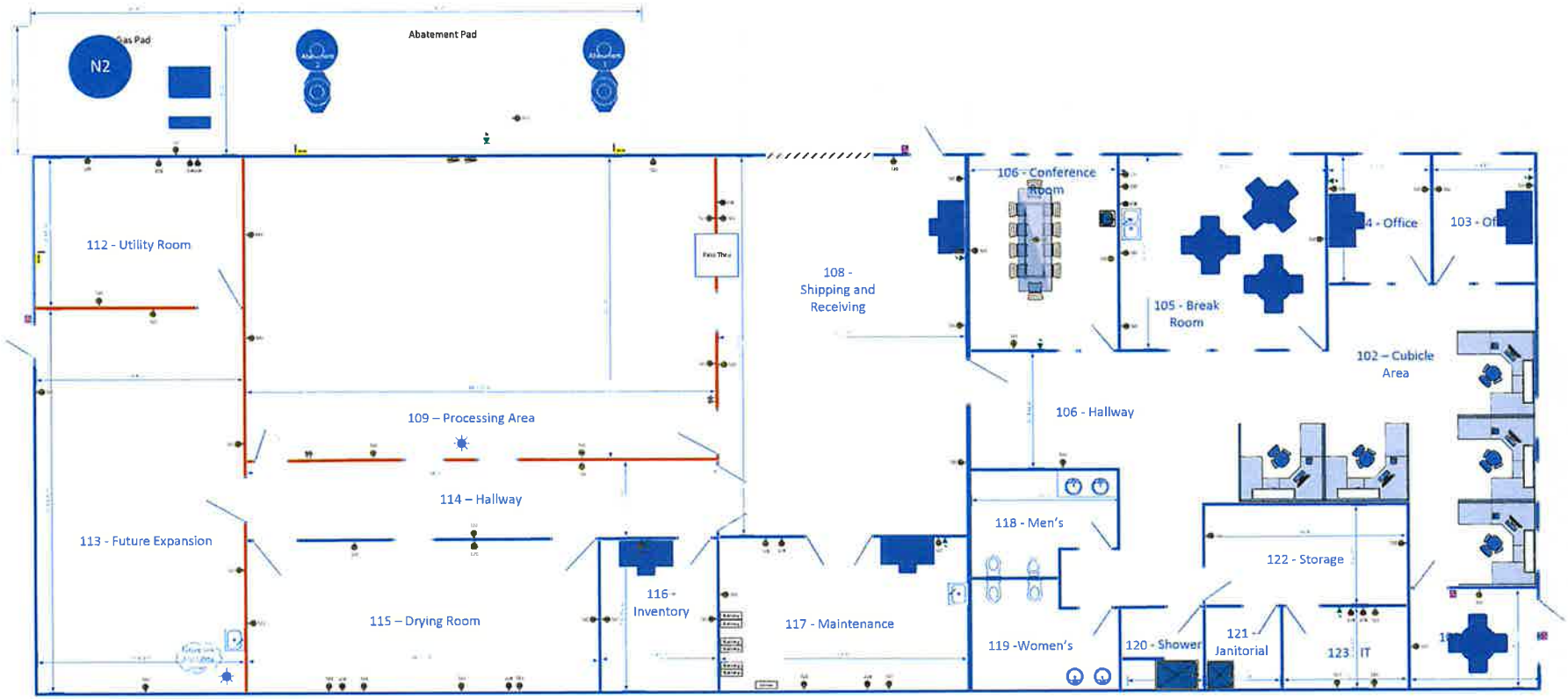
All plan updates shall be reported to Imperial County CUPA via the California Environmental Reporting System (CERS) to ensure the agency has the most current information on file.

Appendix A: RASIRC Imperial Facility Process Flow Diagram

RASIRC Imperial Facility Closed Loop Process Flow Diagram



Appendix B: RASIRC Imperial Facility Layout


N2
Abatement Pad
112 - Utility Room
108 - Shipping and Receiving
106 - Conference Room
4 - Office
103 - Of
105 - Break Room
102 – Cubicle Area
109 – Processing Area
106 - Hallway
114 – Hallway
118 - Men's
113 - Future Expansion
122 - Storage
116 - Inventory
115 – Drying Room
117 - Maintenance
119 -Women's
120 - Shower
121 - Janitorial
123 IT

Appendix C: Storage Unit Datasheet

Safe, Compliant Storage

U.S. CHEMICAL storage® Justrite Safety Group

FireLoc™

FireLoc™ is the perfect choice for the storage of flammables where a fire rating is necessary. Each model utilizes 2-hour fire-rated, non-combustible, weatherproof construction per UL 263 & ASTM E-119. Multiple layers of UL classified fire-resistant gypsum wall board are encased between exterior and interior heavy gauge Galvanneal sheet steel for maximum durability. The roof/ceiling meets a Class A flame spread rating and wind uplift exceeds UL Rating 1-60. Each model exceeds EPA 40-CFR. FireLoc is designed to be placed within 10 to 75 feet of existing structures and/or property set-backs (consult with local code authority).

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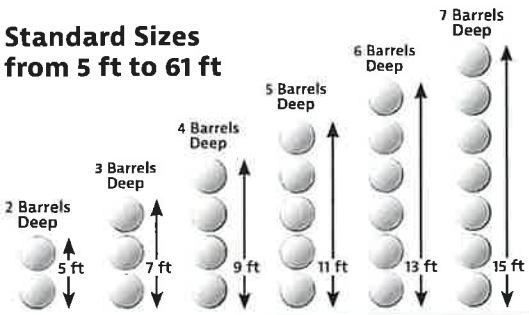
Colors

White Bone Gray Green Brown

Standard Sizes from 5 ft to 61 ft



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Chemical Classifications

Flammables

A flammable liquid is any liquid having a flashpoint below 100° F (37.8° C). However, the exception to this is any mixture having components with flashpoints of 100° F or higher when such components make up at least 99% of the mixture's volume. The flashpoint is the lowest temperature at which a flammable liquid will give off enough vapor to ignite briefly when exposed to a flame.

Flammable liquids are also referred to as Class 1 liquids. Class 1 liquids are separated into the following three classes:

CLASS 1A: Liquids that have flashpoints below 73° F (22.8° C), and a boiling point below 100° F (37.8° C). Examples of this class are Ethyl Ether and Pentane.

CLASS 1B: Liquids that have flashpoints below 73° F (22.8° C), and a boiling point of at least 100° F (37.8° C). Examples of this class are Acetone, Gasoline, and MEK.

CLASS 1C: Liquids that have flashpoints of at least 73° F (22.8° C), and below 100° F (37.8° C). Examples of this class are Turpentine and Xylene.

Combustibles

A combustible is a liquid having a flashpoint of at least 100° F (37.8° C).

Combustibles are divided into two classes:

CLASS II COMBUSTIBLES: Liquids that have a flashpoint of at least 100° F (37.8° C), and below 140° F (60° C). However, the exception to this is any mixture having components with flashpoints of 200° F (93.3° C), when such components make up at least 99% of the total volume of the mixture. Examples of this class are Kerosene and most oil-based paints.

CLASS III COMBUSTIBLES: Liquids with flashpoints of at least 140° F (60° C). Class III combustibles are divided into these two subcategories:

Class IIIA Combustibles - Liquids having a flashpoint of at least 140° F (60° C), and below 200° F (93.3° C). However, the exception to this is any mixture having components with flashpoints of 200° F (93.3° C) or higher, when such components make up at least 99% of the total volume of the mixture. An example of this class is Mineral Spirits.

Class IIIB Combustibles - Liquids having a flashpoint of at least 200° F (93.3° C). Examples of this class are Hydraulic Brake/ Transmission fluids, Lubricating Oils.

First Name: _____ **Last Name:** _____

Email: _____ **Phone:** _____

Company Name: _____

Size

Length: _____ Width: _____ Height: _____

Doors

❑ 36" Swing Qty: ____ ❑ 60" Swing Qty: ____ ❑ Roll-up Qty: ____

Materials/Chemicals (please list those to be stored in building)

_____

_____

Color (chemical-resistant epoxy coating)

❑ White ❑ Bone ❑ Gray ❑ Green ❑ Brown

Electrical Options

❑ Light
❑ Mechanical Fan
❑ Heating Min: ____ Max: ____
❑ Cooling Min: ____ Max: ____
❑ Fire Suppression System

Building Options

❑ Portable Eyewash ❑ Ramp
Shelving: ❑ none ❑ 1 tier ❑ 2 tier ❑ 3 tier ❑ more
❑ Other: _____
_____
_____

Delivery

❑ ASAP ❑ 1-3 months ❑ 6+ months

Setback from Occupied Structure

❑ Inside ❑ Attached ❑ 0-10 ft ❑ 10-75 ft ❑ 75+ ft

To go over this form with us and discuss your needs, please call:
1-800-233-1480 or fax it to 1-336-990-0076. Please include a phone number where we can reach you. Thank you!

ATTACHMENT "J" – COMMENT LETTERS

Office of the Agricultural Commissioner
Sealer of Weights and Measures
852 Broadway, El Centro CA 92243

Jolene Dessert
Commissioner / Sealer

Rachel Garewal
Asst. Commissioner / Sealer

March 15, 2025

To Landscapers, Nurseries, Retailers, Homeowners, and Planning Departments:

This letter is to remind you of the legal requirements you must follow for transporting plants and plant materials into Imperial County. There are numerous quarantines in place to safeguard landscape plants, the agricultural industry of Imperial County, and the whole of California from exotic pests and diseases. Please see the attached "Summary of Shipment Requirements and Quarantines," for information on quarantines that most commonly affect Imperial County.

All plants coming into Imperial County are required by law to be held for inspection by the Agricultural Commissioner prior to planting or being made available for sale. This applies to plants brought in by any party, including commercial businesses and homeowners. It is very important that our office is notified immediately upon arrival of any plant shipment. You must not commingle incoming shipments with other plants until after they are inspected and released by our office.

Call our office as early as possible to schedule an inspection. Inspectors are usually available Monday through Friday, 8:00 a.m. to 4:00 p.m. If you intend to bring a shipment in on a weekend or County holiday, please call ahead to see if an inspector will be available.

If you have any questions or concerns, our office is here to help. Please call us at (442) 265-1500.

Sincerely,

Nelson Perez
Deputy Agricultural Commissioner
Pest Detection and Eradication

Summary of Shipment Requirements and Quarantines

- All nursery stock must be accompanied by valid proof of ownership.
- Nursery stock shipments may be released by phone at the discretion of the Agricultural Commissioner.
- Landscapers and other entities that have a growing ground or holding yard where nursery stock is held prior to delivery to the planting site must be licensed as a nursery.

Pierce's Disease and the Glassy-winged Sharpshooter

The Pierce's Disease Control Program (PDCP) exists in California to prevent the artificial movement and spread of the glassy-winged sharpshooter (GWSS), a vector of Pierce's Disease. Pierce's Disease is caused by the bacterium Xylella fastidiosa. It is deadly to many plant species, and its vector, GWSS, has an extensive list of hosts including many agricultural crops and landscape plants. Imperial County is the only Southern California County not infested with GWSS.

It is unlawful to bring plants into Imperial County from inside the GWSS-infested area; however, nurseries located within the infested area may do so under a compliance agreement from their county's Agricultural Commissioner. It is lawful to bring plants in from a nursery within the infested area so long as they meet the terms of their compliance agreement. These terms include (but are not limited to):

- Notify the Imperial County Agricultural Commissioner (CAC) at least 24 hours prior to shipment.
- Shipment paperwork is stamped with a GWSS compliance agreement number.
- Shipment is accompanied by a "Blue Tag" shipping permit stating "Warning – Hold for Inspection".
- Shipment is accompanied by a valid Certificate of Quarantine Compliance (CQC), if applicable.

For additional information regarding the PDCP or GWSS, please visit https://www.cdfa.ca.gov/pdcp/.

Other Plants with Quarantine Restrictions

- All **citrus species** from other California counties and other states.
- All **palms of the Phoenix genus**, including Pygmy Date Palms (P. roebelenii), except when originating from certain areas of Riverside County.
- Nursery stock originating in **Florida** (specifically Burrowing and Reniform Nematode [3 CCR § 3271] and Imported Fire Ant [7 CFR § 301.81]).
- Nursery stock originating in **Arizona** (specifically Ozonium Root Rot [3 CCR § 3261]).
- All **lettuce plants** are prohibited unless tested for Lettuce Mosaic Virus.
- All plants shipped *from* Imperial County must be certified free from Ozonium Root Rot by the CAC.

Penalties for Failure to Comply with Requirements (California Food and Agricultural Code [FAC])

Any violation of quarantine requirements is an infraction punishable by a fine of one thousand dollars ($1,000) for the first offense. Second and subsequent offenses within three years are punishable as misdemeanors. (FAC § 5309)

In addition to any other penalties, any person violating quarantine requirements may be liable civilly in an amount not exceeding ten thousand dollars ($10,000) for each violation. (FAC § 5310)

In lieu of civil action, the Agricultural Commissioner (CAC) may levy a civil penalty of up to two thousand five hundred dollars ($2,500) for each violation. (FAC § 5311)

Anyone who negligently or intentionally violates any state or federal law or regulation by importing any plant or other article infested by pest or disease and causes an infestation or causes the spread of an existing infestation beyond quarantine boundaries is liable civilly up to twenty-five thousand dollars ($25,000) for each act that constitutes a violation. (FAC § 5028)

150 SOUTH NINTH STREET
EL CENTRO, CA 92243-2850

TELEPHONE: (442) 265-1800
FAX: (442) 265-1799

AIR POLLUTION CONTROL DISTRICT

June 6, 2025

J. Kelvin Selby
Director - EHS
RASIRC

SUBJECT: RASIRC Health Risk Assessment and Modeling Report for Hydrazine Facility under CUP 24-0024

Dear Mr. Selby:

The Imperial County Air Pollution Control District (Air District) thanks you for your quick response to the previous comments and appreciates the opportunity to review and comment on the revised Health Risk Assessment (HRA) and the Screening Health Risk Assessment Air Modeling Report for the proposed Hydrazine processing facility located within the Mesquite Lake Specific Plan area also identified with Assessor's Parcel Number 040-250-024.

After reviewing the revised documents and attachments, the Air District finds the HRA and Modeling Reports are consistent with OEHHA and Air District guidelines and finds the reports adequate for the planning portion of the project. The HRA, Modeling Report, and attachments should be submitted formally to the Imperial County Planning and Development Services to be included in the project's documentation.

As a reminder the HRA and Modeling Reports are also undergoing Air District engineering review as part of the permitting process and will result in a separate determination once completed.

If you have any additional questions or concerns, please contact us by email or by calling our office at 442-265-1800.

Respectfully,

Ismael Garcia
Environmental Coordinator II

Reviewed by,
Monica N Soucier
APC Division Manager

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

June 3, 2025
Sent via email

Luis Bejarano
Planner I
Imperial County Planning and Development Services Department
801 Main Street
El Centro, CA 92243
luisbejarano@co.imperial.ca.us

Dear Mr. Bejarano:

RASIRC IMPERIAL FACILITY (PROJECT)
MITIGATED NEGATIVE DECLARATION (MND)
SCH# 2025041465

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND from Imperial County Planning and Development Services Department (ICPDS) for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: RASIRC, Inc
Objective: The objective of the Project is to construct, maintain, and operate a hydrazine production and processing facility and a warehouse, which will include an office and associated parking spaces and site improvements. Primary Project activities include the production, processing, and storage of hydrazine and other raw chemical materials and waste.
Location: The Project is located at 3555 Old Highway 111, Imperial, CA 92251, south of East Keystone Road. The Project site is within the Mesquite Lake Specific Plan area, on Assessor's Parcel Number 040-250-024-000.
Timeframe: Unknown

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below, including those in Attachment A, to assist ICPDS in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

CDFW is concerned with the MND's lack of analysis of impacts to western burrowing owl (*Athene cunicularia hypugaea*) and the proposed mitigation measure (MM) BIO-1. MM BIO-1, as it is currently proposed in the MND, results in the take of western burrowing owl in the form of capture through tagging and may result in take in the form of mortality through passive relocation. Western burrowing owl is currently designated as a candidate for potential listing as a protected species under CESA. As a candidate for listing, western burrowing owl is afforded the same protections as State-listed endangered or threatened species. CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or candidate species, without appropriate authorization by CDFW. CDFW recommends the ICPDS conduct breeding and non-breeding season surveys following the *Staff Report on Burrowing Owl Mitigation* (CDFG, 2012) to identify presence or absence of the species onsite, and then formulate adequate avoidance, minimization, and

mitigation measures. CDFW recommends the Project proponent obtain an incidental take permit (ITP) for western burrowing owl should the species be present.

Compliance with CEQA is predicated on a complete and accurate description of the environmental setting that may be affected by the proposed Project. CDFW is concerned that the assessment of the existing environmental setting with respect to biological resources has not been adequately analyzed in the MND. CDFW is concerned that without a complete and accurate description of the existing environmental setting, the MND likely provides an incomplete or inaccurate analysis of Project-related environmental impacts and whether those impacts have been mitigated to a level that is less than significant. Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts, that special emphasis should be placed on environmental resources that are rare or unique to the region, and that significant environmental impacts of the proposed Project are adequately investigated and discussed.

I. Environmental Setting and Related Impact Shortcoming

Would the Project 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 CDFW or USFWS?

COMMENT 1:

Section IV Biological Resources, Page 18

Issue: The MND mentions "current land conditions" but ICPDS did not conduct biological surveys to determine what those current land conditions are. The MND has not accurately described or fully established the biological resources present on-site, limiting the CEQA Lead Agency's and CFDW's ability to analyze the Project's potential impacts and evaluate the effectiveness of the proposed avoidance, minimization, and/or mitigation measures on candidate, sensitive, or special status species. In addition, the MND states impacts to these species will be less than significant with mitigation incorporated. But, the MND does not identify the significant impacts that require mitigation measures to be proposed.

Specific impact: Subsection (a) in the MND states that "the proposed project does not expect to cause any physical changes to the environment due to its established land designation and the existing development surrounding the property…" However, constructing a warehouse and parking lot is a direct physical change to the environment and is an activity undertaken by a public agency, which is defined as a "project" under CEQA Guidelines § 21065. Surrounding development may alter the existing baseline conditions on the Project site but does not account for the

impacts from the Project itself. While the Project may be consistent with the zoning designation in the Mesquite Lake Specific Plan, for which an EIR was already certified, CEQA requires that any peculiar Project-specific significant impacts still be analyzed.

Additionally, the MND selected a "Less than Significant with Mitigation Incorporated" determination for subsection (a), but does not identify what the significant impacts are or how the proposed mitigation measure will reduce impacts to a less than significant level. Without conducting surveys that follow CDFW guidance and protocol, potential Project impacts to candidate, sensitive, or special status species may be mischaracterized, resulting in avoidable, unminimized, or unmitigated impacts not identified or analyzed by the MND. If levels of significance cannot be accurately established, neither the CEQA Lead Agency nor CDFW can adequately determine if the proposed mitigation measures truly reduced impacts to a less than significant level.

Why impact would occur: The MND does not mention that any biological studies or surveys were conducted specifically for the Project.

The Mesquite Lake Specific Plan was adopted in 2006, almost two decades prior to the circulation of the MND for the proposed Project. During this timeframe, baseline conditions of the Project site and State regulations have changed, which results in potentially significant effects on biological resources that were not analyzed in the Mesquite Lake Specific Plan Master EIR.

Evidence impact would be significant: CEQA Guidelines § 15183 states that for projects consistent with existing zoning or general plan policies, the public agency shall still examine the environmental effects that (1) are peculiar to the Project or its site, (2) were not analyzed in the prior EIR for which the Project is consistent, (3) are potentially significant cumulative effects that were not discussed in the prior EIR, or (4) are determined to have a more severe adverse impact than discussed in the prior EIR.

Per CEQA Appendix G (Evaluation of Environmental Impacts), which is reiterated on page 14 of the MND, the explanation of each issue should identify the significance criteria or threshold used to evaluate each question and the mitigation measure identified to reduce the impact to less than significance.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Project Description and Related Impact Shortcoming)

To reduce impacts to less than significant: CDFW recommends that ICPDS conduct species-focused surveys per CDFW's guidance and protocols (https://wildlife.ca.gov/Conservation/Survey-Protocols) and incorporate the results

into the MND. It is recommended that MND include an analysis of the Project's impacts to biological resources and include specific detailed documentation that supports the analysis and determination of impacts. Without information regarding biological resources, with evidence to support the MND's determinations, the MND may not be able to determine whether the project can mitigate its impacts to a less than significant level. CDFW recommends the MND be revised and recirculated to provide this information. However, if Imperial County chooses not to collect and disseminate this information, then CDFW recommends that the mitigation measures be updated and/or added, as provided below in Attachment A, to determine if the site is occupied by special-status species.

Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS?

COMMENT 2:

Section IV Biological Resources, Subsections (b) and (c), Page 18

Issue: The MND states that "No water bodies, riparian habitats, or other environmentally sensitive natural communities are present within the boundaries of the parcel," but does not mention that any surveys were conducted to confirm the presence, of water bodies, riparian habitats, or environmentally sensitive natural communities, or the lack thereof.

Specific impact: The Project site is bound by drainages and canals operated by the Imperial Irrigation District (https://www.iid.com/water/about-iid-water/water-service-maps) which can host riparian communities. The MND acknowledges that there are drainage swales on the Project site that has the potential presence of wetland features. Certain sensitive species, such as western burrowing owl, are commonly found along irrigation canals in Imperial Valley (Center for Biological Diversity et al., March 2024).

The MND has "Less than Significant Impact" determinations selected for subsections (b) and (c), but does not state what any of those less than significant impacts are. For subsection (b), the MND states that there are no water bodies or riparian habitats within the Project site. It is unclear what thresholds were used to determine the level of significance for subsections (b) and (c).

Why impact would occur: No surveys or aquatic delineations were conducted, so an adequate baseline in which to evaluate impacts or formulate avoidance, minimization, or mitigations was not established. CDFW notes that baseline surveys should have already been conducted and included in the environmental document for adequate public review and comment.

Evidence impact would be significant: CEQA Guidelines § 15064.7(a) states, "a threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect ... compliance with which means the effect normally will be determined to be less than significant." Additionally, CEQA Guidelines § 15064.7(d) state, "a public agency shall explain how the particular requirements of that environmental standard reduce project impacts ... to a level that is less than significant, and why the environmental standard is relevant to the analysis of the project under consideration.

Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other materials containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Environmental Setting and Related Impact Shortcoming)

To reduce impacts to less than significant: CDFW recommends that the ICPDS conduct field surveys, delineate jurisdictional resources, and submit a notification, if appropriate, per Fish and Game Code Section 1602 prior to commencing Project construction activities.

II. Mitigation Measure or Alternative and Related Impact Shortcoming

Would the Project 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 CDFW or USFWS?

COMMENT 3:

Section IV Biological Resources, Subsection (a), Page 18

Issue: MM BIO-1 results in the take of western burrowing owl (*Athene cunicularia hypugaea*). Tagging and relocating western burrowing owl is take in the form of capture.

The MND states, "the Mesquite Lake Specific Plan includes established mitigation measures in its Master Environmental Impact Report to address potential impacts to burrowing owls, which will be strictly followed." However, the MND does not state what those mitigation measures are, how those mitigation measures will prevent

take of the species, or how ICPDS will ensure that those mitigation measures will be followed. The Mesquite Lake Specific Plan Master EIR is not available for review on the CEQAnet web portal or on the ICPDS website. MM BIO-1 also defers the formulation of avoidance, minimization, and mitigation measures to a later date, which does not allow for meaningful public review or comment.

Specific impact: Focused western burrowing owl surveys were not conducted following the guidance in the *Staff Report on Burrowing Owl Mitigation* (CDFG, 2012), despite the MND acknowledging that predicted habitat for western burrowing owl is within the Project area and its surroundings.

MM BIO-1 proposes actions that are considered take under CESA, which is prohibited without CDFW authorization. MM BIO-1 also only commits to guidelines approved by the US Fish and Wildlife Service, not CDFW guidelines outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFG, 2012). Furthermore, MM BIO-1 defers the formulation of avoidance, minimization, and mitigation measures until pre-construction survey results are reported. Under CEQA Guidelines § 15126.4, formulation of mitigation measures should not be deferred to a future time, unless the Lead Agency commits to the mitigation, adopts specific performance standards the mitigation will achieve, and identifies the potential actions that can feasibly achieve that performance standard.

Why impact would occur: The status of western burrowing owl has changed since the Mesquite Lake Specific Plan Master EIR was finalized in 2006. As of October 2024, the western burrowing owl was named as a candidate for potential listing as a protected species under CESA.

Without focused surveys conducted following the guidance in the *Staff Report on Burrowing Owl Mitigation* (CDFG, March 2012), adequate baseline conditions cannot be established, and associated impacts cannot be identified or analyzed. The MND does not propose avoidance, minimization, or mitigation measures if burrowing owls are found on the project site during construction, nor does the MND propose obtaining a CESA ITP if take of the species were to occur.

Evidence impact would be significant: Imperial Valley has high rates of western burrowing owl occurrence due to agriculture ecosystems (Center for Biological Diversity et al., March 2024). As a candidate species for listing, western burrowing owl is granted the same protection as threatened or endangered species under CESA. Take of any CESA-listed species is prohibited except as authorized by State law (Fish and Game Code § 2080 and § 2085). Consequently, if a Project, including Project construction or any Project-related activity during the life of the Project, results in the take of CESA-listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation. This may include an ITP (Fish and Game Code § 2081).

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Environmental Setting and Related Impact Shortcoming)

Mitigation Measure MM BIO-1:
To reduce impacts to less than significant: CDFW recommends that ICPDS obtain an ITP for potential take of western burrowing owl, and that the MND contain a full avoidance, minimization, and mitigation strategy for public review and comment. In addition, CDFW recommends MM BIO-1, listed in Attachment A, to be incorporated into the MND.

III. Editorial Comments and/or Suggestions

The "Environmental Factors Potentially Affected" checklist on page 10 does not have any resources checked. CDFW recommends completing the checklist with appropriate resources selected.

Several of the explanations in Section IV of the MND do not support the selection of "Less than Significant Impact." In addition to the discrepancy in subsections (b) and (c), detailed in Comment 2, subsections (e) and (f) also have explanations that do not align with the impact determinations. Subsection (e) states, "It is *not expected* that the project will conflict with any local policies or ordinance protecting biological resources …" but then states, "Any impact would be considered less than significant," without explaining why impacts that are not expected would have a less than significant impact or identifying what those impacts are, despite it being considered less than significant. Similarly, subsection (f) states, "It is *not expected* that the project will conflict with the provisions of an… habitat conservation plan," but then states, "Any impact would be considered less than significant." Again, it is unclear why an impact that is not expected to occur would have a less than significant impact determination instead of a "No Impact" determination. Under the CEQA Guidelines § 15071, an MND not only requires a proposed finding that the Project will not have a significant effect on the environment, but also document the reasons to support the finding. It is the CEQA Lead Agency's responsibility to conduct proper environmental review and determine the level of impacts from the construction, operation, and maintenance of the Project. Per the CEQA Guidelines § 15020, the Lead Agency is responsible for the adequacy of its environmental documents. The lack of clarity on the Project's impacts hinders effective public review and comment.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural

communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist ICPDS in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Lily Mu, Senior Environmental Scientist (Specialist) at (909) 544-2521 or Lily.Mu@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Brandy Wood
4D759253408941E...

Brandy Wood
Environmental Program Manager

Attachments
Attachment A. Draft Mitigation, Monitoring, and Reporting Program

ec: Office of Planning and Research, State Clearinghouse, Sacramento
state.clearinghouse@opr.ca.gov

REFERENCES

California Department of Fish and Game (CDFG). March 2012. Staff Report on Burrowing Owl Mitigation. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline

Center for Biological Diversity, Defenders of Wildlife, Burrowing Owl Preservation Society, Santa Clara Valley Audubon Society, Urban Bird Foundation, Central Valley Bird Club, San Bernardino Valley Audubon Society. March 2024. Petition Before the California Fish and Game Commission to List California Populations of the Western Burrowing Owl (*Athene cunicularia hypugaea*) as Endangered or Threatened Under the California Endangered Species Act. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=221396&inline

Imperial Irrigation District. Water Service Maps. https://www.iid.com/water/about-iid-water/water-service-maps. Accessed May 28, 2025.

Attachment A
Draft Mitigation, Monitoring, and Reporting Program

Draft Mitigation, Monitoring, and Reporting Program (MMRP)
CDFW provides the following language to be incorporated into the MMRP for the Project.

Biological Resources (BIO)		
Mitigation Measure (MM) Description	**Implementation Schedule**	**Responsible Party**
MM BIO-1 Western Burrowing Owl Surveys, Avoidance, Minimization, and Mitigation: **Burrowing owl currently identified on site shall be mitigated per the guidance of the Staff Report on Burrowing Owl Mitigation (CDFG, 2012) such that (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals.** **Focused Burrowing Owl Surveys** **To avoid construction-level impacts to unidentified burrowing owls on-site, qualified biologists shall conduct focused burrowing owl surveys during the breeding and non-breeding season in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG, 2012). The survey shall cover the Project site and a 150-meter (500-foot) buffer, where legally accessible. The Project applicant shall coordinate with CDFW in the preparation of a Burrowing Owl Protection and Mitigation Plan (see below) to allow commencement of disturbance activities on site. A**	Prior to the start of Project related activities	Project Proponent

preconstruction survey shall be conducted within 14 days prior to the start of construction activities (see below). **Pre-construction Survey** **Pre-construction take avoidance surveys for this species shall be conducted within 14 days prior to the start of ground disturbance and 24 hours prior to construction to determine the presence or absence of this species within the Project footprint. A report shall be submitted by a qualified and agency-approved biologist to CDFW. The Project footprint shall be clearly demarcated in the field by the Project engineers and biologist prior to the commencement of the pre-construction take avoidance surveys. The surveys shall follow the guidance of the Staff Report on Burrowing Owl Mitigation (CDFG, 2012).** **Avoidance and Mitigation** **Depending on the Project activity type and associated disturbance, a minimum avoidance buffer distance of 50 meters (165 feet) to 100 meters (330 feet) during the nonbreeding season (September through January) and 100 meters (330 feet) to 250 meters (825 feet) during the breeding season (February through August) shall be maintained between active burrows and construction activities. A qualified biologist shall monitor the burrowing owls for any sign of distress and adjust the buffers as necessary to ensure no take occurs.** **If active burrows are present within the Project footprint and complete avoidance is infeasible, the Project proponent shall not undertake Project activities and Project activities shall be postponed until the appropriate authorization (i.e. CESA incidental take permit under the California Fish and Game Code § 2081) is obtained.** **If approved by CDFW through the Burrowing Owl Protection and Mitigation Plan (described below), passive relocation methods are to be used by the qualified biologist to exclude the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season, where resident owls have not yet begun egg laying or**		

incubation, or where the juveniles are foraging independently and capable of independent survival, in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG, 2012) and a CDFW-approved Burrowing Owl Protection and Mitigation Plan. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow but will exclude any animals from re-entering the burrow. If burrowing owls exhibit sign of stress in attempting to re-enter the burrow, the one-way-door shall be removed to prevent take of the individual. A period of at least 1 week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. Only burrows that will be directly impacted by the Project shall be excavated and filled in to prevent their reuse. Off-site "replacement burrow site(s)" must consist of a minimum of two suitable, unoccupied burrows for every burrowing owl or pair to be passively relocated. As the Project construction schedule and details are finalized, a qualified biologist shall prepare a Burrowing Owl Protection and Mitigation Plan that will detail the approved, site-specific methodology proposed to avoid, minimize and mitigate impacts on this species. Passive relocation, destruction of burrows, construction of artificial burrows, and mitigation shall only be completed upon prior approval by and in coordination with CDFW. The Burrowing Owl Protection and Mitigation Plan shall include success criteria, remedial measures, active monitoring, and an annual report to CDFW, and shall be funded by the Project applicant. For the purposes of this mitigation measure, a "qualified biologist" is a biologist who meets the requirements set forth in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and approved by CDFW. ~~Prior to grading or construction, an initial survey to determine the presence of burrowing owls shall be conducted between February and September by a biologist that has been determined by the USFWS as qualified to conduct burrowing owl surveys. The survey shall be conducted in accordance with the latest USFWS-approved guidelines. A report on the results of the survey and recommended avoidance or mitigation measures shall be provided by the applicant to the USFWS, CDFW, and Imperial County Planning and Development~~		

~~Services Department. No clearing or ground-disturbing activities may be taken until the report and recommendations have been accepted by the USFWS, CDFG, and Imperial County Planning and Development Services Department. All burrowing owls found on the project site shall be tagged by USFWS-qualified burrowing owl biologist.~~ ~~If burrowing owl burrows are found present within construction areas and a 50-meter (165-foot) boundary of construction limits, avoidance is the preferred level of mitigation. If avoidance cannot be met, or no burrowing owls were detected during the first survey, a second survey shall be conducted no less than 30 days prior to any clearing, ground disturbance, or demolition of existing structures. If no burrowing owls are present, a third survey shall be conducted no less than five days prior to the commencement of construction and, if no burrowing owls are present, clearing, grading, demolition, or construction may commence. If burrowing owls were present at the time of the second survey and CDFW and USFWS Office of Law Enforcement concur, on-site passive relocation can be implemented. The project biologist shall evaluate the suitability of nearby habitat, the availability of an existing or constructed alternate burrow for each burrow excavated, and the opportunity for preservation of the site, such as through a conservation easement that would be managed to promote burrowing owl use of the site. Relocation requires that owls should be excluded flow burrows in the immediate impact zone and 50-meter buffer zone by installing one-way doors in burrow entrances, left in place for 48 hours before excavation. Relocation of owls should only be implemented during the nonbreeding season.~~		

California Department of Transportation

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June 2, 2025

11-IMP-111
PM R17.173
RASIRC Imperial Hydrazine Facility
MND/SCH#2025041465

Mr. Luis Bejarano
Planner I
Imperial County Planning and Development Services
801 Main Street
El Centro, CA 92243

Dear Mr. Bejarano:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Mitigated Negative Declaration (MND) for the RASIRC Imperial Hydrazine Facility located on Old Highway 111 near State Route 111 (SR-111) and E. Keystone Road. The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities.

Safety is one of Caltrans' strategic goals. Caltrans strives to make the year 2050 the first year without a single death or serious injury on California's roads. We are striving for more equitable outcomes for the transportation network's diverse users. To achieve these ambitious goals, we will pursue meaningful collaboration with our partners. We encourage the implementation of new technologies, innovations, and best practices that will enhance the safety on the transportation network. These pursuits are both ambitious and urgent, and their accomplishment involves a focused departure from the status quo as we continue to institutionalize safety in all our work.

Caltrans is committed to prioritizing projects that are equitable and provide meaningful benefits to historically underserved communities, to ultimately improve transportation accessibility and quality of life for people in the communities we serve.

We look forward to working with the Imperial County in areas where the County and Caltrans have joint jurisdiction to improve the transportation network and connections

between various modes of travel, with the goal of improving the experience of those who use the transportation system.

Caltrans has the following comments:

Hydrology and Drainage Studies

- Please provide hydraulics studies, drainage and grading plans to Caltrans for review.
- Provide a pre and post-development hydraulics and hydrology study. Show drainage configurations and patterns.
- Provide drainage plans and details. Include detention basin details of inlets/outlet.
- Provide a contour grading plan with legible callouts and minimal building data. Show drainage patterns.
- On all plans, show Caltrans' Right of Way (R/W).
- Early coordination with Caltrans is recommended.
- Caltrans generally does not allow development projects to impact hydraulics within the State's R/W. Any modification to the existing Caltrans drainage and/or increase in runoff to State facilities will not be allowed.

Hauling

The California Department of Transportation (Caltrans) has discretionary authority with respect to highways under its jurisdiction and may, upon application and if good cause appears, issue a special permit to operate or move a vehicle or combination of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. The Caltrans Transportation Permits Issuance Branch is responsible for the issuance of these special transportation permits for oversize/overweight vehicles on the State Highway network. Additional information is provided online at:
http://www.dot.ca.gov/trafficops/permits/index.html

Noise

The applicant must be informed that in accordance with 23 Code of Federal Regulations (CFR) 772, the Department of Transportation (Caltrans) is not responsible for existing or future traffic noise impacts associated with the existing configuration of SR-111.

Environmental

Caltrans has discretionary authority over any portion of the project that is or will be within Caltrans' R/W. The April 2025 MND for the RASIRC Imperial Facility does not currently identify any work within Caltrans' R/W.

If future work within Caltrans' R/W is necessary for the N2H4 (Hydrazine) processing facility, then an encroachment permit will be required. This includes, but is not limited to, work related to construction, site improvements, transportation access, and/or parking. The encroachment permit should include an Environmental Document that identifies scope of work, environmental analysis, and potential impacts and concerns within Caltrans R/W.

Supporting technical studies may be requested to substantiate findings within the Environmental Document.

Sustainability

Caltrans recommends collaboration between our agency and Imperial County on the proposed transportation related topics including adaptation strategies to help improve the City's resilience to potential climate change impacts and strategies to reduce vehicle miles traveled (VMT), and off-road and on-road greenhouse gas (GHG) emissions.

Caltrans recognizes that transportation is a leading contributor to GHG emissions in the region and is dedicated to reducing and mitigating transportation related emissions. We recommend collaborating with Caltrans on the following measures such as increasing the use of zero emission vehicles, installing electric vehicle (EV) charging stations, identifying right-of-way areas to be used for carbon sequestration, and complete streets.

The existing climate hazards discussed in this document will have an impact of the transportation system. We recommend working with Caltrans on determining the preventative strategies the Caltrans can take to keep roadways operational and ensure their longevity against climate stressors such as increased temperatures, changes in precipitation patterns, wildfire, and flooding. Caltrans recognizes the central role that transportation planning plays in safety and ensuring that when these natural hazards do occur, citizens have a reliable evacuation route.

Mitigation

Caltrans endeavors that any direct and cumulative impacts to the State Highway network be eliminated or reduced to a level of insignificance pursuant to the CEQA and National Environmental Policy Act (NEPA) standards.

Right-of-Way

Per Business and Profession Code 8771, perpetuation of survey monuments by a licensed land surveyor is required, if they are being destroyed by any construction.

Any work performed within Caltrans' R/W will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans' R/W prior to construction.

Additional information regarding encroachment permits may be obtained by visiting the website at https://dot.ca.gov/programs/traffic-operations/ep. Projects with the following:

- require a Caltrans Encroachment Permit
- have completed the Caltrans Local Development Review (LDR) process
- have an approved environmental document

need to have documents submitted for Quality Management Assessment Process (QMAP) process via email to D11.QMAP.Permits@dot.ca.gov. Early coordination with Caltrans is strongly advised for all encroachment permits.

If you have any questions or concerns, please contact Mark McCumsey, LDR Coordinator, at (619) 985-4957 or by e-mail sent to Mark.McCumsey@dot.ca.gov.

Sincerely,

Kimberly D. Dodson

KIMBERLY D. DODSON, GISP
Branch Chief
Local Development Review

Department of Toxic Substances Control

Yana Garcia
Secretary for
Environmental Protection

Katherine M. Butler, MPH, Director
8800 Cal Center Drive
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Gavin Newsom
Governor

SENT VIA ELECTRONIC MAIL

June 3, 2025

Luis Bejarano
Planner I
Imperial County Planning and Development
801 Main Street
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RE: MITIGATED NEGATIVE DECLARATION FOR RASIRC IMPERIAL FACILITY DATED APRIL 30, 2025, STATE CLEARINGHOUSE NUMBER 2025041465

Dear Luis Bejarano,

The Department of Toxic Substances Control (DTSC) reviewed the Mitigated Negative Declaration (MND) for RASIRC Imperial Facility (Project) The applicant submitted a CUP application for a N2H4 (Hydrazine) processing facility, with Initial Study #24-0034. The facility will include storage metal containers with appropriate cabinets and containers for raw chemical materials and waste, detached from the main building and constructed to store chemicals safely. The proposed building is a 7,000 square foot warehouse facility with an office, parking, and site improvements. The building will have access to a driveway from Old Highway 111. DTSC recommends and requests consideration of the following comments:

1. Section 10 "Description of Project" of the MND states: "The purified hydrazine is trademarked as Brute ® Hydrazine. Hazardous waste will be collected and properly disposed of by a licensed third-party company." Please elaborate on the proposed waste characterization methods and include them in future environmental documents.
2. Future Environmental documents should:

- Include documentation and engineering drawings to confirm the enclosed work environment.
- Clarify if there is a secondary containment system around the building and critical process areas. These containment systems should be capable of capturing Hydrazine or its byproducts in the event of a spill, leak, or structural failure to prevent environmental contamination.
- Elaborate construction details on the external buildings where the purified Hydrazine will be stored. Protection of the sub-soil should be done through a secondary containment to prevent any potential spills/leaks from leaching into the soil.

DTSC appreciates the opportunity to comment on the RASIRC Imperial Facility. Thank you for your assistance in protecting California's people and environment from the harmful effects of toxic substances. If you have any questions or would like clarification on DTSC's comments, please respond to this letter or via the CEQA Review Inbox for additional guidance.

Sincerely,

Tamara Purvis

Tamara Purvis
Associate Environmental Planner
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Tamara.Purvis@dtsc.ca.gov

cc: (via email)

Governor's Office of Land Use and Climate Innovation
State Clearinghouse
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