ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Aquifer Protection Program (APP) Permit

SUMMARY and RESPONSE
to
PUBLIC COMMENTS

Copper World Operations
Copper World, Inc.

Permit No. 513690
LTF 90620

Response to comments received during the public comment period:
January 5, 2024 to April 10, 2024

Prepared By:
Arizona Department of Environmental Quality (ADEQ),
Groundwater Protection Section

Date: August 29, 2024

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1. INTRODUCTION

1.1. Summary

The Copper World Operations ("the Mine") will be an open-pit copper mine developed by Copper World, Inc., hereafter referred to as "the Permittee". The mine is proposed as a truck-and-shovel open-pit mining site, located on private land in Pima County, Arizona, within the Upper Santa Cruz and Cienega Creek groundwater basins. The Mine operation is located approximately 28 miles southeast of Tucson, Arizona and 12 miles southeast of Sahuarita, Arizona. The central point of the main project operations is located at latitude 31º 51' 43.2"N and longitude 110º 46' 26.4"W.

The Individual Aquifer Protection Program (APP) permit covers the entire lifecycle of the facility including its operational, closure, and post-closure periods.

1.2. Public Notice Comments

The public comment period began on January 5, 2024, and ended April 10, 2024. The preliminary decision to issue an Individual APP permit and the associated public hearing was published in the *Green Valley News & Sun* on January 7, 2024. In response to public requests for an extended public comment period, ADEQ extended the public comment period twice. Notices of these extensions were published in the *Green Valley News & Sun* on February 4, 2024 and March 10, 2024. A public hearing was held in person on March 5, 2024 at Corona Foothills Middle School on 16705 S. Houghton Road in Vail, AZ, from 6:00 to 8:00 pm.. This summary of public comments received and associated ADEQ responses is prepared in accordance with the Arizona Administrative Code (A.A.C.) R18-9-109.

Everyone who commented during the public comment period has the right to file an appeal and request a hearing on the final decision as an appealable agency action under Arizona Revised Statute (A.R.S.), Section 41-1092(03) by filing a written request for hearing or notice of appeal within 30 days of issuance of the final decision. A Request for Hearing or Notice of Appeal is filed when it is received by ADEQ's Hearing Administrator as follows:

Hearing Administrator
Office of Administrative Counsel
Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, AZ 85007

The Request for Hearing or Notice of Appeal shall identify the party, the party's address, the agency and the action being appealed and shall contain a concise statement of the reasons for the appeal. Upon proper filing of a Request for Hearing or Notice of Appeal, ADEQ will serve a Notice of Hearing on all parties to the appeal. If you file a timely Request for Hearing or Notice of Appeal you have a right to request an informal settlement conference with ADEQ under A.R.S. Section 41-1092(06). This request must be made in writing no later than 20 days before a scheduled hearing and must be filed with the Hearing Administrator at the above address.

2. DESCRIPTION OF CHANGES TO THE INDIVIDUAL APP PERMIT

Several typographical errors were corrected, and clarifying language was added in the Individual APP permit that are not reviewed in detail here. Substantive changes to the Individual APP permit include:

- **Table 13, Pages 45-47**: This table lists Pore Pressure Alert Levels (measured in feet of head) with designated Alert Levels set for Level 1 and Level 2. A note has been added at the bottom of the table stating that the numeric alert levels will be modified to reflect the actual elevation above mean sea level limit for each piezometer, instead of feet of head, in a future amendment once the Tailing Storage Facility (TSF) has been constructed and piezometers have been installed.
- **Compliance Schedule Item (CSI) 26**: This item addresses the financial assurance staging, specifying the required tuning of the final assurance: Bonding will be staged as follows: 10% of the total due at permit issuance, 25% of the total due at the start of construction, and 100% of the total due before approval to operate.
- **Financial Capability: The language regarding financial capability has been updated. Originally, the permit stated that "**The Bonding may be staged". This has now been changed to :Bonding will be staged as follows: 10% of the total due at permit issuance, 25% of the total due at the start of construction, and 100% of the total due before approval to operate. Operate means the discharge of pollutants as defined in A.R.S. §49-201(12)." See CSI 26.
- **Groundwater Monitoring Wells**: ADEQ added two groundwater monitoring well locations east of the Rosemont Pit, based on the public comments.
- **CSI 27**: ADEQ added a requirement that the Permittee submit a well construction and installation proposal for the Rosemont Pit Monitoring Wells to ADEQ before installation. The proposal must include, at a minimum,: well construction diagrams, proposed locations (latitude and longitude), and a proposed installation schedule. The submission must be sealed by an Arizona Registered Geologist or other qualified registrant.

3. RESPONSES TO COMMENTS

Comments received during the public comment period are summarized below. The comments are followed by ADEQ's responses. The following summary of comments is organized by topic. Comments may have been shortened or paraphrased for presentation in this document; a copy of the comments in an unmodified format is available on the permit of interest web page. Written comments received on the official record were received during the formal Public Comment period and verbal comments received on the official record were received during the Public Hearing.

3.1. ADEQ Compliance and Enforcement

1. Commenters suggested there was a lack of enforceable provisions and consequences for violations in the permit such as monetary fines and/or termination of the mining permit.

ADEQ Response: As the Agency that administers the Aquifer Protection Program (APP), ADEQ has the legal authority to ensure that the Permittee complies with all permit requirements. Once the permit is issued, the Permittee becomes a responsible party, obligated to meet regulatory requirements designed to protect groundwater quality throughout the lifetime of the facility. ADEQ has a robust compliance and enforcement process that includes complaint-response inspections, routine inspections, and enforcement actions. These actions include informal enforcement such as Notices of Opportunity to Correct Deficiencies (NOC) and Notices of Violation (NOV) in addition to formal enforcement actions including Administrative Orders and Judicial Orders. Penalties for violations can carry a maximum of $25,000 per violation, per day.

2. Commenters expressed a desire for ADEQ to utilize a tiered enforcement process such as shutting the mine down which would motivate the Permittee to fix the issue.

ADEQ Response: In the event that a Permittee does not comply with permit requirements, statutory provisions, or rule provisions, ADEQ follows procedures outlined in the Agency's Compliance Handbook. This tiered approach includes the following steps:

- **Compliance Assistance**: ADEQ begins by providing assistance and guidance to regulated entities to help them understand and comply with environmental regulations. This can include providing educational materials, training sessions, and technical assistance.

- **Compliance Monitoring**: ADEQ conducts regular inspections to ensure that Permittees are complying with environmental regulations. This can involve reviewing records, conducting site visits, and collecting samples for analysis.
- **Notice of Opportunity to Correct Deficiencies (NOC)**: This action is an informal compliance assurance tool issued by ADEQ in accordance with A.R.S. Section 41-1009(E) and (K) that provides a Permittee, who is the responsible party, an opportunity to correct a deficiency.
- **Notice of Violation (NOV)**: If a violation is identified during monitoring or inspections, ADEQ may issue a Notice of Violation. This formal notice outlines the violation(s) identified, specifies the regulatory requirements that have been violated, and details the corrective actions required.
- **Consent Order**: This is a formal enforcement bilateral administrative order issued with the written agreement of the responsible party and ADEQ. ADEQ has authority within individual programs to issue orders, and an RP has the ability to negotiate, consent to the order, and waive their right to appeal the order pursuant to A.R.S. Section 41-1004 and 41-1092.07(F)(5).
- **Compliance Orders**: If the permittee does not address the issues in the Notice of Violation, ADEQ may issue a Compliance Order. This is a formal legal document that requires the responsible party to take specific actions to come into compliance within a certain timeframe.
- **Legal Action**: In cases of serious or repeated violations, ADEQ may pursue legal action, which can include civil litigation or administrative proceedings. This can result in court-ordered penalties, injunctions, or other remedies.

3. Commenters expressed dissatisfaction with no mention in the permit of a maximum fine or enforcement penalties for violations.

ADEQ Response: ADEQ has the statutory authority, pursuant to A.R.S. Section 49-262, to seek monetary penalties through the inspections, compliance, and formal enforcement process. The statute allows ADEQ to seek penalties of up to $25,000 per day, per violation. This amount is set by law, and ADEQ cannot exceed that amount.

4. Commenters asked for rigorous enforcement to protect citizens and prevent destruction of water quality and requested the very highest standards of aquifer protection, not pre-existing standards.

ADEQ Response: ADEQ is committed to rigorous and continuous oversight of regulated facilities to protect public health and groundwater quality. In the last three calendar years (2022, 2023, 2024 through April 30, 2024), ADEQ's Groundwater Protection & Reuse section has conducted 740 inspections, issued 230 informal enforcement actions and 32 formal enforcement actions. More importantly than citing violations, the Section has resolved 493 compliance conditions, directly addressing and mitigating impacts to public health and the environment through the protection of groundwater quality.

5. Commenters asked if ADEQ could be held responsible and liable for permitting the Copper World project.

ADEQ Response: Under A.R.S. Section 49-243(B) ADEQ is legally obligated to issue an APP permit if the facility demonstrates that it will meet all legal requirements. The Permittee, the entity or individual issued the permit, is responsible for ensuring compliance with all the conditions and requirements outlined in the permit.

ADEQ has the legal authority to ensure that the Permittee complies with the permit requirements. Through inspections, compliance monitoring, and formal enforcement processes, ADEQ ensures that the permit conditions are met. Please refer to the ADEQ Compliance and Enforcement section 3.1 comment #2 for more detail on the enforcement process.

6. Commenters expressed concerns about the effectiveness of ADEQ enforcement actions following air and water contamination incidents and remediation efforts to remove the contamination from the environment.

ADEQ Response: ADEQ's robust inspections and compliance program performs routine and complaint-response inspections to ensure that a Permittee is complying with permit conditions. In the event of noncompliance, ADEQ follows the Compliance Handbook to take appropriate action to resolve any potential impact to soil, surface water or groundwater, including Administrative Orders and Judicial Orders.

7. Commenters expressed concern with references to past environmental disasters caused by mining activities and the need for comprehensive safety measures and regulatory oversight to prevent similar incidents in Arizona.

ADEQ Response: ADEQ is the agency designated to meet A.R.S. Title 49, which mandates the protection of Arizona's environment. Our Agency's Mission is to protect and enhance public health and the environment in Arizona. The Agency's core responsibilities encompass planning,

permitting, compliance oversight and inspections, monitoring, assessments, remediation efforts, and community outreach initiatives.

ADEQ employs comprehensive safety measures and robust regulatory oversight. In tandem with evolving permitting and design concepts like Best Available Demonstrated Control Technology (BADCT), ADEQ's compliance and enforcement strategies are continuously refined to mitigate the risk of environmental impacts.

Permittees must conduct frequent monitoring, reporting and visual inspections of their permitted facilities. This is to ensure that their operations protect groundwater and minimize the likelihood of environmental impacts.

8. Commenters expressed concerns for accountability and responsibility for potential water source contamination.

ADEQ Response: The Permittee bears the responsibility of ensuring compliance with all conditions and requirements stipulated in the permit. Under A.R.S. Section 49-263, unlawful criminal acts related to APP permit violations (A.R.S. Section 49-263), including felonies and misdemeanors, can be pursued by the Arizona Attorney General. The permittee is accountable for remedying any contamination resulting from operations or during closure monitoring. Financial assurance can be utilized in cases of bankruptcy or if the permittee abandons the operation.

3.2. ADEQ Permitting Process and Authorities

1. Several commenters expressed concerns that ADEQ is not delivering the mission of the agency that is “to protect and enhance public health and the environment in Arizona," and should prioritize public health and environmental protection over industry interests, especially in light of outdated laws and poor management practices.

ADEQ Response: ADEQ's mission is to protect and enhance public health and the environment in Arizona. ADEQ’s authority to achieve this mission pursuant to the APP is under A.R.S. Title 49 and A.A.C. Title 18 Chapter 9. By law, ADEQ is required to issue an Individual APP permit to an applicant if all requirements in statute and rule are met. ADEQ has determined that all statutory and regulatory requirements have been met to issue an Individual APP permit for the Mine. The requirements of the permit ensure that the operation of the facility is protective of groundwater and minimize the likelihood of environmental impacts.

2. Commenters pointed to apparent discrepancies between the APP Permit Application date and the Pre-Feasibility Study (PFS) released by Hudbay in 2023 and requested ADEQ explain the process to respond to this apparent change in mining plan and processes. Furthermore, it was suggested by commenters that ADEQ suspend the application for the Copper World, Inc. facility until an accurate mine description, with accompanying technical analysis, is included in the application.

ADEQ Response: ADEQ processed the application received from Copper World, Inc. in 2022. Table 1 of the APP permit lists the facilities covered under the permit. If there are any changes to the discharging facilities, including design modifications, the Permittee must submit an amendment application to ADEQ. ADEQ does not have the legal authority to revoke, suspend, or modify an APP application or permit based on proposals revising the mine plan or made while acquiring federal permits. Design changes during mine development are common, and must be addressed through the established permitting process.

3. Commenters critiqued the mining industry's historical and current practices in Arizona, calling for responsible and sustainable mining practices akin to those in countries like Sweden.

ADEQ Response: By law, ADEQ is responsible for administering various environmental programs. These include the APP. Since its creation in 1986 through legislative action, the APP has issued over 450 individual permits. These require robust design, construction, operation, maintenance and closure activities to protect groundwater quality. Such measures include rigorous monitoring and reporting. They also include operations and maintenance. Lastly, they require the Permittee to take action if any corrective action is required.

In additionADEQ's inspections and compliance program performs routine and complaint-response inspections to ensure that a facility is complying with permit conditions. If the permitted facility is not in compliance, ADEQ follows the Compliance Handbook, and takes appropriate action to resolve any impact to soil, surface water or groundwater.

4. Commenters are concerned that ADEQ shoulders a tremendous responsibility with insufficient authority and backing, which seems to set them up for inevitable failure

ADEQ Response: ADEQ's authority to achieve its mission of protecting public health and the environment pursuant to the APP is under A.R.S. Title 49 and A.A.C Title 18 Chapter 9. By law,

ADEQ is required to issue an Individual APP permit to an applicant if all requirements in statute and rule are met.

Like all state agencies, ADEQ has a specific budget and resources and prioritizes those resources to achieve its mission.

5. Commenters expressed the need for government intervention to mitigate the harmful impacts of mining on communities and the environment, particularly in the absence of proactive measures by mining companies.

ADEQ Response: ADEQ's authority to protect public health and the environment under the APP comes from A.R.S. Title 49 and A.A.C. Title 18 Chapter 9. Any facility that may discharge pollutants impacting groundwater is required to obtain an APP permit that meets all state law requirements. These permits include requirements for monitoring, record-keeping and reporting. ADEQ also has compliance and enforcement authority to ensure permit compliance. This includes reviewing submitted data, conducting on-site inspections, and testing samples.

6. Commenters asked ADEQ to update outdated laws and management practices and adopt stricter regulations due to the high environmental and health risks from the mining industry and protect communities and the environment effectively.

ADEQ Response: ADEQ's authority to protect public health and the environment under the APP comes from A.R.S. Title 49 and A.A.C. Title 18 Chapter 9. ADEQ's regulations require any facility that may discharge pollutants impacting groundwater to obtain an APP permit that meets all state law requirements.

ADEQ disagrees that the laws and policies governing the APP are outdated. Facilities regulated under the APP are subject to high standards that are protective of groundwater including robust design requirements, construction, operation, maintenance and closure activities. Additionally, the APP permit mandates rigorous monitoring, reporting, operations and maintenance along with necessary corrective actions to address any potential issues.

7. Commenters critiqued the broken nature of the permit process.

ADEQ Response: ADEQ disagrees that the APP permitting process is broken. Since the APP creation in 1986 through legislative actions, the Program has issued over 450 Individual permits which require robust design, construction, operation, maintenance and closure activities in

order to be protective of groundwater quality. Such measures include rigorous monitoring, reporting, operations and maintenance as well as actions required of a regulated facility if any corrective action is required.

8. Commenters observed a discrepancy between the number and nature of comments supporting and opposing the project. For example, letters in support of the project are somewhat similar and mostly from addresses of people who do not live in the area where the mine is located.

ADEQ Response: ADEQ appreciates all comments submitted on the draft permit during the public comment period. The public comment period was open for all interested parties to express their views on the project.

9. Commenters indicated that ADEQ should hire experienced mining experts who enjoy and excel at problem-solving, contrasting this with the perceived difficulty and lack of familiarity among ADEQ officials with mining processes. Commenters suggested that ADEQ consult with mining experts from institutions like Michigan Tech, University of Arizona, and others to ensure the protection of drinking water from contamination linked to mining activities.

ADEQ Response: ADEQ employs skilled and knowledgeable staff from a wide range of backgrounds, experiences, and educational qualifications, including expert hydrogeologists and engineers with mining expertise. ADEQ notes that mining experts may not be experts in environmental protection. If the Agency identifies a need for specific expertise, it may seek consultation from external experts including from academia.

10. Commenters critiqued ADEQ's handling of the permit process, with calls for more transparency, community engagement, and reliance on scientific expertise.

ADEQ Response: ADEQ's permitting process is governed by A.A.C. Title 18 Chapter 1 Article 5 and A.R.S. Section 41-1072 through A.R.S. Section 41-1079. ADEQ's permit process includes pre-application meetings, application completeness review, technical review, and internal and external reviews. ADEQ's public engagement process for this permit included public notices, community meetings, public hearings, and in-depth review of and response to public comments.

ADEQ maintains a Permits in Process (PIP) report, on the Agency website, https://azdeq.gov/PIP_Report. The PIP report includes a detailed, interactive map that is updated daily, showing all the water quality permit applications the ADEQ is reviewing and the status of each application.

Interested stakeholders can also request permit applications through the ADEQ Record Center at https://www.azdeq.gov/records.

For this specific project ADEQ created a Permit of Interest page where all application and permit documents are available for public access.

3.3. ADEQ Transparency

1. Commenters expressed concern about insufficient transparency regarding data availability and monitoring.

ADEQ Response: By law, ADEQ is required to maintain public records and make them available for public inspection (A.R.S. Title 39, Chapter 1 and A.R.S. Section 49-205). Any member of the public may submit a public records request through ADEQ's Records Center at https://www.azdeq.gov/records to request any documents, data, communications or other items relating to any Individual APP permit.

ADEQ is in the process of developing a strategy to regularly publish sampling data results to the Permit of Interest page and any enforcement actions, or remediation measures taken. In the event data is received and not published in the interim, any member of the public may submit a public records request through the Records Center at ADEQ (https://www.azdeq.gov/records).

2. Many commenters urged ADEQ to consult with the community and consider their concern before proceeding with the review of the application, citing perceived inadequacies in ADEQ's current laws and policies governing the permitting process.

ADEQ Response: ADEQ's community outreach included a 96-day public comment period and a community meeting for the project on February 20, 2024 at Corona Foothills Middle School to hear community concerns and questions about the Copper World, Inc. APP permit. A formal public hearing was held on March 5, 2024. Please refer to Public Notice Comments Sections for more details.

ADEQ is required by law to issue an Individual APP permit if all requirements in statute and rule are met. ADEQ has determined that all statutory and regulatory requirements have been met to issue an Individual APP permit for the Mine.

3. Commenters requested public access to notification procedures, availability of testing results and self-monitoring, enforcement, remediation measures, and potential shutdown of the mine.

ADEQ Response: In accordance with Arizona law, with a few exceptions, all documents created by or received by ADEQ are public record and are available for public review. Any member of the public may submit a public records request for any documents, data, communications or other items relating to the Individual APP permit. These requests can be made through the ADEQ's Records Center at ADEQ (https://www.azdeq.gov/records).

ADEQ is developing a strategy to regularly publish to the Permit of Interest page, azdeq.gov/wqd/CopperWorld, sampling data results, enforcement actions, and remediation measures taken.

Please note that the permittee will not initiate routine groundwater monitoring and reporting until the conclusion of the ambient monitoring period which is not anticipated to conclude until fall of 2026. Following the ambient monitoring period and once the Permittee begins conducting routine quarterly monitoring and reporting to ADEQ with established limitations, the data will be available.

3.4. Alignment with Mission and Vision

1. The proposal conflicts with Arizona Governor Hobbs' vision for a resilient, environmentally sustainable state.

ADEQ Response: ADEQ supports the Governor's vision for a resilient and environmentally sustainable state and there is direct correlation to ADEQ's mission to protect and enhance public health and the environment in Arizona. ADEQ's authority is under A.R.S. Title 49 and A.A.C. Title 18. Under A.R.S. Section 41-1030, ADEQ is required to base licensing (permitting) decisions solely on requirements or conditions that are specifically authorized by the A.A.C. or A.R.S.

In Arizona, by law, facilities that will or may discharge pollutants impacting groundwater are required to have an APP permit. This includes facilities that discharge a pollutant directly to an aquifer, to a land surface, or vadose zone – the area between the ground surface and the water table – where there is a reasonable probability that the pollutant will reach an aquifer. Facilities must have an APP permit prior to mining or discharging within Arizona in accordance with A.R.S. Section 49-241. Per A.A.C. R18-9-A201(G)(1),

ADEQ must issue the permit if the director determines the applicant will comply with A.R.S. Section 49-241 through A.R.S. Section 49-252.

3.5. Air Quality

1. ADEQ received several comments regarding the potential air quality impacts from the mine.

ADEQ Response: Copper World, Inc. has submitted to ADEQ an air quality permit application related to the Mine and any proposed issuance of that permit will be published for comment. The air permit application is being handled by ADEQ's Air Quality Division, and they have been made aware of these comments.

As designed by Arizona Law, the APP permit regulates discharges of pollutants to Arizona's groundwater to protect groundwater quality. As such, ADEQ does not have the legal authority to base the APP permitting decisions on air quality impacts.

3.6. APP Discharging Facilities

1. Commenters assert that ADEQ failed to account for Hudbay's plan for TSF-N tailings facility and the Albion Process for copper production.

ADEQ Response: ADEQ processed the APP permit application received from Copper World, Inc. in 2022. Table 1 of the APP permit lists the facilities covered by the permit. The application submitted to ADEQ does not include the TSF-N tailings facility. Please note design changes during mine development are common, and must be addressed through the established permitting process. These changes would need to be permitted prior to operating any additional facilities. If the Permittee decides to incorporate the TSF-N tailings facility, it would

need to submit to ADEQ an application to amend the permit to incorporate the new facility into the existing permit.

The Albion process, also known as a concentrate leach process, was included in the September 2022 application submitted to ADEQ. The APP regulates discharges of pollutants to Arizona's groundwater to protect groundwater quality. The APP does not regulate the specific mineral processing methods used for extracting minerals; this is determined by the applicant. Regardless of the mineral processing method chosen, the Permittee has to meet AWQS.

Facilities, like tanks that are designed to not discharge, are not regulated by the program. Some of the process steps in the concentrate leach process and the heap leaching process share facilities, like the solvent extraction and electrowinning (SX-EW) plant. However, the concentrate leach process is completed in tanks, which are not regulated under the APP because the concentrate leach process does not include any discharging facilities.

2. Commenters expressed support for stricter regulatory measures, including the inclusion of all mine facilities in the permit and the requirement for geochemical analysis to determine what contaminants may be in the waste from the Albion Process which will be combined with the flotation tailings and deposited in the TSFs.

ADEQ Response: ADEQ has included all applicable regulatory requirements in the APP permit. The Permittee provided to ADEQ the geochemical impact assessment for the project in Appendix G.1 of the 2022 APP permit application. The Albion/Concentrate leach process is in the current application submitted by the Permittee. The Albion process results in the production of pregnant leach solution (PLS) which is used in the solvent extraction and electrowinning (SX-EW) plant to make copper cathode, sulfur which is used to make sulfuric acid, and a filter cake that goes to the precious metals circuit for the recovery of gold and silver. This circuit utilizes weak acid dissociable (WAD) cyanide in the process. Following a cyanide destruction phase, the residue from the process is mixed with the tailings from the sulfide ore milling and flotation process. As stated in Section 8.8 of the 2022 APP permit application, the concentration of cyanide in the tailings reporting to the tailings storage facilities (TSFs) will be less than 0.2 parts per million (ppm), which is the aquifer water quality standard (AWQS) for free cyanide.

The APP regulates discharges of pollutants to Arizona's groundwater to protect groundwater quality. The APP does not regulate the specific mineral processing methods used for extracting

minerals; this is determined by the applicant. Regardless of the mineral processing method chosen, the Permittee has to meet AWQS.

3. Commenters expressed the need for thorough modeling and monitoring of environmental factors, such as microbial activity in tailings piles, to ensure compliance with regulatory standards and protection of water quality and cited Arizona Administrative Code (A.A.C.) R18-9-A202(A)(4) in support.

ADEQ Response: The Permittee does not propose to include any biological processes in its mining activities. All the processes authorized by this permit are designed as non-organic processes.

4. Commenters criticized the draft APP permit's perceived inadequacies and expressed disagreement that certain mine facilities are designated as exempt or non-discharging and are therefore not included in the draft APP permit and are not subject to BADCT requirements. These include but are not limited to the Rosemont Pit; truck shop, fuel storage and dispensing stations, and truck wash; primary and secondary crushers for sulfide and oxide ore; reagent storage facility; and the acid plant.

ADEQ Response: Arizona law A.R.S Section 49-201 defines discharge, the requirement to obtain a permit to discharge, exemptions, and the categorization of discharging facilities under the APP permit. Table 1 of the APP permit lists the regulated discharge facilities under the individual APP permit authority.

Facilities such as the East/Rosemont Pit are not regulated because the pit does not have a discharge as defined in A.R.S Section 49-201(12). The pit will not add a pollutant directly to an aquifer or to the land surface.
In A.R.S Section 49-250, Arizona law specifically exempts certain types of facilities from the APP permit. The Tailings Slurry Pipeline(s), thickeners, Concentrate Leach Fine Grinding Plant, primary and secondary crushers for sulfide and oxide ore, reagent storage facility; and the acid plant meet the exemptions from the APP permit found in A.R.S Section 49-250 (6) and (22).

To the extent that they constitute discharging facilities, the truck shop, fuel storage and dispensing stations, and truck wash will be covered under general permits specifically written for these types of facilities.

5. Hudbay will expand the dumping of tailings and waste rock to the forest service land which is now prohibited, which will be a disaster to water supply.

ADEQ Response: The APP regulates discharges of pollutants to Arizona's groundwater to protect groundwater quality. ADEQ lacks the legal authority under the APP permit to base a licensing decision on the land ownership, either private, state, or federal land. Regardless of the facility's location, the applicant must adhere to relevant regulations and permit requirements associated with the APP permit. The 2022 APP permit application for the Mine does not include the deposition of tailings on federal land. In the event this activity was an objective of the Permittee, an amendment to the current permit would be required.

3.7. Aquifer Water Quality Standards (AWQS)

1. Commenters requested that the permit be revised to include enforceable numeric aquifer water quality standards for parameters that currently do not have established numerical limits or rely on older standards including the following constituents: Sulfate, arsenic, uranium, calcium, copper, iron, manganese, potassium, and selenium.

ADEQ Response: Pursuant to A.A.C. R18-11-406, selenium has an enforceable AWQS that is included in the permit. Arsenic and uranium AWQS are in the process of being updated. Although the rulemaking process is not yet complete, the Permittee has agreed to implement the new AWQS, based on the U.S. Environmental Protection Agency's (EPA) National Primary Drinking Water Standards, in the APP permit at the locations where ambient groundwater monitoring determines groundwater meets the EPA's maximum contaminant levels (MCLs).

Ambient groundwater monitoring is required to determine the current groundwater quality at the Mine to set enforceable aquifer quality limits (AQLs) and alert levels (ALs) at monitoring locations. Ambient monitoring for all constituents will be performed to determine the ambient concentrations of dissolved constituents.

Calcium, iron, manganese, potassium, and sulfate do not have established AWQS under A.A.C R18-11-406, and pursuant to A.R.S Section 49-223(G), ADEQ does not have authority to include standards for these parameters.

2. Commenters requested ADEQ to adopt the EPA's National Primary Drinking Water Standards or better published on January 2, 2024 for arsenic and uranium and criticized Arizona's current arsenic standards' potential health risks. Commenters suggested the

permit not be issued until the state's AWQS are updated to align with federal guidelines or that assurances new standards will be retroactively applied to the permit.

ADEQ Response: ADEQ is responsible for the development of the drinking water aquifer water quality standards. These standards are designed to protect the State's aquifers, all of which have been designated for drinking water protected use. The AWQS are used in ADEQ's APP permit and elsewhere. ADEQ is in the process of formally adopting seven federal drinking water MCLs as AWQS, including arsenic and uranium.

The Permittee has agreed to implement the new AWQS, based on the U.S. Environmental Protection Agency's (EPA) National Primary Drinking Water Standards, in their APP permit at the points of compliance (POC) wells. This implementation will occur where ambient groundwater monitoring determines groundwater meets the updated MCLs for uranium and arsenic.

ALs and AQLs for POCs cannot be set in the permit until ambient groundwater quality is determined by eight consecutive rounds of groundwater monitoring as described in A.A.C. R18-9-A202(A)(6)(b)(i) which is required by compliance schedule item (CSI) 15 of the permit. If ambient groundwater quality meets the EPA MCLs at a monitoring location, ADEQ will set AQLs equal to the MCLs, and ALs equal to 80% of respective MCLs. If ambient groundwater quality monitoring determines water quality does not meet the AWQS at a POC, a location-specific AL and AQL will be assigned based on the criteria in Sections 2.5.3.3 and 2.5.3.4 of the permit.

3. Commenters criticized the narrative water quality standards and recommended that numeric ALs and AQLs be included in the permit based on existing groundwater conditions. Commenters also recommended that ADEQ set all initial AQLs and ALs equal to aquifer water quality standards (AWQS) and then follow protocols and reporting for exceedances as specified in Section 2.6.2.8 of the permit to provide information about groundwater quality during the first two years.

ADEQ Response: Numeric water quality standards will be established in the permit after the ambient monitoring period is completed. Commenters expressed concern over the lack of established limits in the permit at the time of issuance, but this is typical for newly permitted facilities. Numeric limits cannot be set until existing groundwater quality is characterized through ambient water quality sampling.

Since ambient groundwater quality has not yet been characterized, many monitored contaminants are listed as "reserved" in Table 19 of the permit, instead of numeric AQLs and ALs. The term "reserved" is a placeholder that specifically denotes that at the conclusion of eight rounds of quarterly groundwater sampling, the Permittee is required to submit an ambient groundwater monitoring report and permit amendment request to ADEQ. This application will propose ALs and AQLs based on the collected ambient data. The permit will then be amended to replace the "reserved" placeholders with actual values.

Construction of the POC wells listed in Table 2 of the APP permit and collection of ambient groundwater monitoring data required to submit the ambient groundwater monitoring report is contingent upon permit issuance. Baseline groundwater monitoring in the POC wells is required to measure ambient aquifer water quality before enforceable limits for pollutants can be established at monitoring locations. ADEQ will set the AQL at the AWQS if the eight rounds of ambient groundwater monitoring data determine water quality at a point of compliance that meets the AWQS.

If the eight rounds of ambient groundwater monitoring data determines groundwater quality fails to meet the AWQS at the POC at the time of permit issuance, the applicant must submit an AQL proposal for each pollutant that exceeds an AWQS pursuant to A.A.C. R18-9-A202(A)(6)(ii) and Sections 2.5.3.3 and 2.5.3.4 of the APP permit.

ADEQ is currently in the process of formally adopting the EPA MCLs with corresponding AWQS. The Permittee has agreed to implement these standards at monitoring locations where ambient monitoring determines groundwater quality meets the new AWQS. While there are established numeric AWQS, ADEQ can require additional monitoring and reporting if in ADEQ's review a determination is made that other pollutants may degrade the aquifer directly or indirectly and based on what is likely to be in the discharge. In the event more parameter testing is required, ADEQ may include testing of parameters under the Narrative AWQS in A.A.C. R18-11-405.

3.8. Best Available Demonstrated Control Technology (BADCT)

1. Commenters raised concerns that ADEQ's APP permit does not effectively prevent heavy metal contamination using the Best Available Demonstrated Control Technology (BADCT).

ADEQ Response: The Arizona Mining BADCT Guidance Manual is a policy ADEQ uses to present various BADCT design strategies for applicants to consider when designing for discharge reduction under the APP. The BADCT manual allows the Permittee to propose one of two approaches: either prescriptive BADCT design or Individual BADCT designs based on site-specific conditions. The Permittee proposed individual BADCT designs for the tailings facility.

The individual BADCT proposed at the tailings facility employs a seepage collection system. This is a network of perforated pipes that are designed to collect drainage from low points along the base of the tailings and conveys tailings seepage fluids to collection sumps and ponds. The water from these seepage collection sumps and ponds are conveyed by pipes back to the mill and reused as makeup water. The individual BADCT seepage collection design is estimated to capture up to 98% of the seepage. This BADCT approach will allow the facility to achieve the greatest discharge reduction possible, including heavy metals and other pollutants, to ensure aquifer water quality standards (AWQS) are not exceeded in the aquifer at the downgradient point of compliance (POC) wells. BADCT designs are selected based on a combination of performance and cost to achieve discharge reduction required in the APP permit.

The Permittee utilized the prescriptive BADCT for the Heap Leach Facility (HLF), Primary Settling Pond, Pregnant Leach Solution, Stormwater Ponds, Raffinate Pond, Reclaim Pond, and Process Area Stormwater Pond, as detailed in the application, to minimize groundwater pollutants.

2. Commenters expressed concern that ADEQ is allowing the use of old-fashioned refining processes that are not Best Available Technology defined in BADCT. The old process produces considerable amounts of pollution compared to newer methods that reduce pollution.

ADEQ Response: The APP permit protects groundwater quality by regulating discharges of pollutants to groundwater. Refining processes such as Albion Process, solvent extraction and electrowinning processes are not discharging facilities and ADEQ does not have the legal authority under the APP to specify the types of refining methods used in mining. Arizona law requires that groundwater quality be protected, regardless of the processes used by the applicant, which the applicant has fulfilled in their proposed design by utilizing the seepage collection system to capture up to 98 % of the seepage, installing the POC wells, and monitoring the at the POC.

3. Commenters observed that Copper World, Inc. used the Prescriptive approach to Best Available Demonstrated Control Technology (BADCT). From their perspective, Prescriptive BADCT seems to be the easy way to approach BADCT and includes less data. Commenters assert that ADEQ should reconsider if Prescriptive BADCT is appropriate based on the mine's proximity to residential areas and the potential for contamination.

ADEQ Response: ADEQ provides two options for an APP permit applicant to demonstrate their facility meets BADCT requirements in accordance with the BADCT Manual:

- The Prescriptive BADCT approach involves evaluating and selecting a predetermined discharge control technology as the BADCT design. This approach provides a simplified method for an APP permit applicant to propose BADCT that will be acceptable to the ADEQ.
- The Individual BADCT approach allows the applicant to evaluate and compare alternatives (alternative discharge control systems) which combine site characteristics with demonstrated control technologies (DCTs) that can be applied to arrive at a BADCT design. This approach provides a method for an APP permit applicant to utilize a site-specific BADCT design that can incorporate water quality protection characteristics that may arise due to climate, vadose zone conditions beneath the facility, operational procedures, and other factors.

The BADCT manual does not contain a Prescriptive BADCT design for base metal tailings storage facilities (TSFs), therefore the Permittee utilized the individual BADCT approach. Individual BADCT for TSFs considers site conditions to design the best available demonstrated control technology to prevent groundwater contamination.

The Permittee utilized the Prescriptive BADCT for various APP facilities for the Mine such as PLS and Stormwater ponds as well as the heap leach facility. These BADCT chosen for these facilities are industry standards.

4. Commenters observed that the Arizona Mining BADCT Guidance Manual has not been updated since 2004, and there have been substantial advances in tailings storage engineering in the past 20 years. Commenters asked what evidence can ADEQ provide that these 20-year-old standards will actually be sufficient to protect their drinking water?

ADEQ Response: ADEQ acknowledges that the Arizona Mining BADCT Manual (Manual) has not been updated since 2004. It is important to note that the Manual is a non-binding, substantive policy statement and does not limit ADEQ or its applicants in designing and constructing facilities that exceed the standards outlined in the Manual. As a result, ADEQ is not bound to or limited by the Manual and in fact, the Permittee has designed the facility using current best practices that meet or even exceed the Statutory requirements of A.R.S. Section 49-243.

The Permittee has committed to Global Industry Standard on Tailings Management (GISTM) standards for dam safety that go beyond the current BADCT guidance. The GISTM Dam Safety standards have been designed considering recent dam failures across the world to protect public health and environment. ADEQ has several compliance schedule items (CSIs) in the permit to ensure that the Permittee follows the GISTM standard for dam safety during operation. Additionally, Hudbay's Canadian operations adhere to the Towards Sustainable Mining (TSM) standard issued by the Mining Association of Canada (MAC). The TSM is a leading global tailings management standard which is regularly updated, independently verified, and utilized in multiple jurisdictions. As a member of the MAC, the TSM standard is mandatory for Hudbay's Canadian operations but Hudbay committed to complying with TSM for all operations, including Copper World Operations. The individual BADCT, a site-specific design, proposed for the tailings facility is a seepage collection system that will provide 98% capture of tailings seepage fluids.

5. Commenters observed that if this mine was shifted over to the adjacent federal land, which Hudbay wanted to use originally but found the Federal government opposed to using the pristine forest land for dumping the toxic tailings, then the EPA's more stringent guidelines and permitting would have applied. Commenters assert that the EPA would have done the monitoring to ensure public safety. Commenters assert that the switch to private land has eliminated the more stringent guidelines, which it should not.

ADEQ Response: The APP permit is designed specifically to protect groundwater quality by regulating discharges of pollutants to groundwater. ADEQ's authority under the APP is focused solely on groundwater protection and does not extend to permitting decisions based on the land ownership, whether private, state or federal land. While federal or state lands may have additional requirements pursuant to other laws, the APP permit applies the same rigorous standards regardless of land ownership.

6. Commenters noted that the permit does not require liners for the pit lakes.

ADEQ Response: A mine pit lake forms as a result of open-pit surface mining operations. Dewatering the pit during mining involves pumping of groundwater from the excavation to lower the water table and create a dry working environment. In order for dewatering activity to occur, the pit(s) cannot be lined. This dewatering process is essential for maintaining safe and efficient mining operations by preventing flooding and instability in the pit walls. After the completion of pit excavation, groundwater levels are expected to gradually stabilize and return to equilibrium. This process usually occurs as the surrounding geological formations adjust to the altered hydrological dynamics resulting from the excavation activities. Since groundwater will be flowing into the pit no pollutants will leave the pit making a liner is unnecessary.

The Heavy Weight, Copper World, and Broadtop Butte pits will be backfilled and no pit lake will be formed at the end of mining. All of the back filled pits will be APP permitted facilities. Please see section 3.30. Waste Rock - Acid Drainage for additional response regarding the backfilling the pits.

The Permittee has not determined if the Peach and Elgin pits will be backfilled. If these pits are not backfilled it is anticipated that lakes formed in these pits may serve as hydraulic sinks. Both pits are regulated as APP facilities under the permit. The two pits will be monitored during the operation , closure and post-closure of the mine.

The East/Rosemont Pit will operate as a hydraulic sink, involving active dewatering during operations and transitioning to passive containment conditions after closure. The hydraulic sink persists under passive conditions induced by higher evaporation rate than groundwater inflow rate, maintaining a flow gradient towards the pit locally, thereby preventing the migration of contaminants from the pit lake to the downgradient aquifer. These hydraulic sink conditions ensure that potential pollutants cannot migrate beyond the pit area, thereby safeguarding local groundwater resources. The 'East Pit' mentioned by commenters is likely the East/Rosemont Pit. The compliance schedule items (CSI) 16 and 20 of the permit require a Monitoring Plan for East/Rosemont Pit Hydrologic Sink that includes the information listed in Section 2.5.5 and Section 2.7.4.3. East pit or East/Rosemont Pit is not an APP facility as mentioned in APP Discharging Facilities comment #4.

7. ADEQ was asked to analyze, disclose and explain the advantages and disadvantages of backfilling the East, Peach and Elgin pits for water conservation due to reduction of evaporative loss in the BADCT analysis.

ADEQ Response: The APP as designed by state law, solely regulates discharges of pollutants to groundwater to protect water quality, and does not have the legal authority to require the Permittee to include measures to reduce evaporative loss, as BADCT is focused on discharge reduction, not water conservation. Furthermore, under A.R.S. Section 41-1030(B), ADEQ cannot base licensing (permitting) decisions on requirements or conditions that are not specifically authorized by rule or statute. Regardless of the mineral processing that has been used, the Permittee has to meet AWQS.

The Heavy Weight, Copper World, and Broadtop Butte Pit will be backfilled and will be regulated as APP facilities, with monitoring and recordkeeping requirements. Copper World, Inc. has not determined if the Peach and Elgin pits will be backfilled. If they are not backfilled it is anticipated that lakes formed in these pits may serve as hydraulic sinks. Both pits are regulated by the permit as the APP facilities. The two pits will be monitored during the operation, closure and post-closure of the mine.

The East/Rosemont Pit will not be backfilled and will be exempt, as mentioned in APP Discharging Facilities comment #4.

8. Commenter states that the ADEQ decision to permit the underdrain collection system design option (Alt 2) was based on a cost-benefit analysis that was incorrectly estimated. Both cost-benefit analysis (CBA) and cost-effectiveness analysis (CEA) include outcomes (i.e., indicators/proxies of benefits like reduced pollution). A CBA, by definition, places a monetary value on outcomes so that both costs and benefits are in monetary units (such as dollars). Hudbay performed the CBA without estimating the costs associated with the resulting benefits, therefore their conclusion that a less expensive method resulting in more seepage is invalid. Even the comparison of design effectiveness that Hudbay provided in its application is not in accordance with state requirements, as specified in the Arizona BADCT Mining Guidance Manual. The Manual states in Section 1.2.3.3. that "The purpose of the load estimation to the aquifer is to provide a consistent method to compare the potential impacts of various designs." No such estimation was provided by Hudbay or used by the ADEQ in selecting the BADCT design for the TSFs. Percent recovery is not the valid sole endpoint to evaluate. However, with respect to the validity of the cost-benefit analysis used by ADEQ, apples cannot be compared to oranges. The relative benefits were not monetarily estimated for the design alternatives and so a conclusion regarding the cost benefit of one design versus another cannot be made and

> any other conclusion reached on that basis would be invalid. And while cost can be a reasonable consideration by an applicant proposing a specific design of a facility, that facility, as stated in Section 1.3.3.7. of the Arizona BADCT Mining Guidance Manual, must meet the criteria of A.R.S. Section 49-243(B)(1) (BADCT) to limit discharges to the maximum extent practicable regardless of cost.

ADEQ Response: ADEQ's determination that the proposed BADCT meets legal requirements was based on a substantive technical review of the BADCT and not only the economics of the tailings storage facility (TSF) alternatives. As mentioned in the Section 1.1.3.6 of the BADCT Manual:

> "In cases where the Reference Design and/or the alternative design result in similar loadings to the aquifer, and discharges do not contain materials listed in A.R.S. Section 49-243(I), the design with the lowest costs (i.e., capital, operations, closure, post-closure and other applicable costs) may be selected as the BADCT design. In such cases, negligible loadings can be considered similar even if the relative difference between loadings is significant (e.g., where loadings from alternatives are small compared to the highest loading that could still comply with aquifer water quality standards, the fact that the loading from one alternative may be up to orders of magnitude smaller may not preclude these loadings from being considered similar."

BADCT is not solely a cost-based model; it evaluates technical feasibility and long-term solutions for protecting groundwater, in addition to considering costs.

The Permittee provided alternative designs for the TSF. The seepage collection system is designed to capture up to 98% of the anticipated seepage versus the liner design which could capture up to 99%. While the liner was estimated to capture more than the seepage collection system, several assumptions that were made in the application to estimate the 99% are optimistic and not likely valid for the life of the facility. As mentioned in the Tailing section 3.27 the seepage collection system is more robust and flexible compared to the liner for the long term.

9. Commenters referred to a cross-section figure provided by Pima County Regional Flood Control District showing the depth to bedrock, which indicates a large drop off in the alluvium to bedrock interface which goes to 400-800 feet below ground surface. Commenters indicated that this demonstrates the varied site conditions and the possibility for leakage through the bedrock directly into the aquifer. Commenters further

concluded that site-specific conditions given in the draft permit are inappropriate and are inadequate in managing pollution in the tailings storage facilities (TSFs).

ADEQ Response: The geological mapping and isopach map provided by Copper World, Inc. (Hudbay September 20, 2023, Attachment 15) are based on extensive geological and geotechnical borehole data collected on the site. This site-specific data is more representative of the project site than the generalized map from the Pima County Flood Control District. According to the site-specific data, the depth to bedrock under TSF1 is 0-50 ft and under TSF2 is 28-65.5 ft. In addition, the POC well network is designed to detect any seepage through the permeable layer into the aquifer.

ADEQ has determined that the site-specific conditions, combined with BADCT requirements meet the requirements of law and will be protective of groundwater.

3.9. Closure and Post Closure Monitoring Period

1. Commenters expressed concern about the presence of pyrite, a common element in copper mining, and its potential environmental impact. During mining, pyrite or tailings containing pyrite exposed to air and water can generate sulfates, leading to acid rock drainage. Commenters indicated that this poses significant concerns for the Copper World Project, particularly given historical issues with uranium and sulfate contamination from Arizona mines. Commenters suggested that effective long-term measures are necessary to control acid rock drainage and minimize the release of harmful toxins during both mining operations and after closure.

ADEQ Response: The Permittee is required to contain pollutants within the permitted footprint of the facility using engineering controls, during and after mining operations. The Permittee is also required to monitor each facility in the APP permit to ensure they are functioning as designed to prevent a discharge. This includes any potential pollutants from material containing pyrite. The APP permit requires the Permittee to encapsulate acid-generating and potentially acid-generating materials with non-acid-generating materials from the waste rock facility (WRF) to provide acid buffering capacity and reduce the leaching of pollutants.

The submitted Conceptual Closure Plan is provided (Appendix M) in the APP application. The primary goal during closure is to reduce the solution volume using enhanced evaporation techniques. Active management will continue until drainage can be handled passively,

potentially by converting existing seepage collection trenches into sulfate-reducing treatment cells or constructing new ones. The Permittee is required to submit a closure plan to ADEQ within 90 days following notification of closure in accordance with A.A.C. R18-9-A201(B)(5). Post-closure monitoring requirements typically include the parameters established for routine groundwater monitoring in the permit. The Permittee is required to conduct post-closure monitoring for a minimum of 30 years.

2. Commenters requested longer-term monitoring of aquifer changes caused by mining operations, asked about the duration and monitoring requirements during post-closure, and when the permit will be terminated. Commenters expressed concern about responsibility and the containment and maintenance of tailings storage facilities to prevent leaching into the water table in perpetuity, and concerns about mitigation measures for side effect toxins during mining operations and post-closure.

ADEQ Response: Post-closure, or long-term, monitoring will be conducted for a minimum of 30 years. The current post-closure plan includes five years of erosion control and 30 years of monitoring. If contaminants are detected during the post-closure period the Permittee will be required to update the post-closure plan, including extending the monitoring period, addressing the contamination, and would be required to re-evaluate the post-closure costs and submit an associated financial assurance mechanism. The post-closure period requirements will extend until ADEQ releases the permit. ADEQ will not release the permit until all permit conditions are met and rule and statute requirements are satisfied.

3. Commenters expressed concerns about permitting heavy metal-contaminated runoff into surface waters after mine closure.

ADEQ Response: The APP regulates discharges of pollutants to Arizona's groundwater to protect groundwater quality. The APP does not regulate discharges to surface waters. Discharges to protected surface waters in Arizona are regulated by the Arizona Pollutant Discharge Elimination System (AZPDES) Program. Under the AZPDES Program, industrial stormwater discharges are regulated by the Multi-Sector General Permit (MSGP). The MSGP requires implementation of a stormwater pollution prevention plan (SWPPP), analytical monitoring, and visual assessments to protect surface water quality. Currently the Permittee does not discharge stormwater to a protected surface water and does not have coverage under the MSGP. Prior to discharging stormwater to protect surface water, either while the mine is in production or after mine closure, AZPDES permit coverage will be required. The discharge of stormwater to a protected surface water without a permit is a violation of the Clean Water Act and Arizona law.

4. Commenters expressed a desire to consider the value of biological factors in soil detoxification and environmental remediation, urging ADEQ to ensure deactivated mines use eco-friendly techniques.

ADEQ Response: The APP permit solely regulates discharges of pollutants to groundwater to protect groundwater quality. ADEQ does not have the legal authority under the APP to evaluate the biological factors in soil detoxification and environmental remediation, nor require the use of eco-friendly techniques.

5. Commenters expressed concerns about the lack of land restoration due to massive tailings.

ADEQ Response: The APP regulates discharges of pollutants to Arizona's groundwater to protect groundwater quality. The APP does not regulate or require specific methods used for land restoration. Under A.R.S. Section 41-1030(B), ADEQ cannot base licensing (permitting) decisions on requirements or conditions that are not specifically authorized by rule or statute. The land restoration and closure plans associated with the APP permit are to ensure groundwater continues to be protected after mining activities are complete. The post-mining land use will be ranching and wildlife habitat. At the time of closure a detailed closure plan must be submitted for ADEQ review and approval. The implemented closure strategy will have to be maintained in perpetuity for each facility unless the post-closure monitoring of groundwater indicates that there is no probability of groundwater impacts.

6. Commenters expressed concern about the sources of soil for the cover and suggested that ADEQ require off-site purchase and transport of soil cover if on-site cover is inadequate. Commenters also raised concerns about the adequacy of the proposed 18-inch soil cover for land reclamation.

ADEQ Response: Based on the information provided in the permit application, approximately five million cubic yards of soil cover is needed to cover the heap leach facility (HLF) and tailings storage facilities (TSFs). There is sufficient material that will be removed and stockpiled during construction to provide this cover. ADEQ will approve the design of the cover to reduce infiltration and improve moisture removal, utilizing methods such as enhancing evapo-transpiration through fine-grained soils or vegetation during closure plan approval. When the mine reaches the end of its operational life, and closure plans are submitted for ADEQ review, the adequacy of the cover and it's depth may change based on new information which

could result in additional result in additional cover being required to prevent impacts to groundwater associated with stormwater impacts and infiltration.

7. Commenters expressed concern regarding viability of revegetation potential on the waste rock facilities without placement of cover.

ADEQ Response: Per the Conceptual Closure Plan in Appendix M, the closure plan for the waste rock facilities will mainly involve grading to facilitate stormwater runoff towards the slopes and benches, along with sediment management in the runoff using sediment basins. These basins, built during operations, will retain their function during closure. The waste rock will undergo direct revegetation, eliminating the necessity for a soil cover. If it is determined that in the post-closure phase of the facility that prior closure activities such as grading and revegetation efforts are not achieving the desired results for stormwater controls, top soil cover or other approaches may be considered based on the previously approved closure and post-closure plans.

8. Commenters recommended that as the 2023 Pre-Feasibility Study notes that sulfate treatment cells are anticipated to be needed in the post-closure period, that sulfate treatment cells should be required in the current permit.

ADEQ Response: The 2023 Pre-Feasibility Study is not included in the current APP permit application. Any design changes or modifications to the discharging facilities will require an amendment to the APP permit. The sulfate reducing cells are mentioned in the Conceptual Closure Plan as a possible closure component (see Appendix M of the 2022 APP application). The need for these cells will be based on testing during the operational and closure phases of the project with as-needed updates to the closure plan.

9. Commenters expressed concerns related to when hydraulic sink monitoring will commence and how Hudbay will manage dewatering to maintain a hydraulic sink during closure and post-closure.

ADEQ Response: The permit requires monitoring of the East/Rosemont Pit Hydrologic Sink to be conducted annually for the first 10 years following the cessation of dewatering, and every five years thereafter, until the end of the post-closure monitoring period. The permit does not stipulate the period of post-closure monitoring. The Permittee has proposed a 30-year period of post-closure monitoring; however, the post-closure monitoring may continue beyond this period if circumstances warrant additional monitoring. The Permittee committed to install two

additional monitoring wells that are intended to monitor during the operational period and during closure and post-closure.

General dewatering of the East/Rosemont Pit area will be initiated prior to initiating mining activities. Mining will be conducted under depressed water table conditions such as active pumping conditions that create a hydraulic sink. Potential contaminants in the pit cannot migrate to the downgradient aquifer under these conditions. Dewatering will continue until the end of operations at which time active dewatering will cease. Any water obtained from dewatering activities will either be retained within the Copper World, Inc. (Mine), site or may be discharged in accordance with a valid Arizona Pollutant Discharge Elimination System (AZPDES) permit through the Clean Water Act (CWA) to protect surface water. As of August 2024, the Permittee has not applied for an AZPDES permit. Groundwater flow modeling simulations demonstrate the passive hydraulic sink formed will persist in the post-closure monitoring period after operations and dewatering ceases, due to the high evaporation rates that are greater than the rate of groundwater seepage and precipitation inflows to the pit.

10. Commenters expressed concern over permitting pollutants to leave the site and potential impact on downstream drinking water wells during the post-closure period.

ADEQ Response: If contaminants are detected during the post-closure period, the post-closure period would be extended, the post-closure plan would be revised, and the Permittee would be required to re-evaluate the post-closure costs and submit an associated financial assurance mechanism. ADEQ has the authority to take enforcement actions should the permittee violate standards established in the permit while in operation, closure or post-closure. Based on A.R.S Section 49-243(B)(2) and (3), pollutants cannot leave the site in concentrations that will cause or contribute to a violation of aquifer water quality standards (AWQS) or degrade the aquifer further if the aquifer already violates, as identified during the ambient monitoring, the AWQS during operation, closure, and postclosure.

11. Commenters noted that the application and permitting record lack a description of handling procedures for the post-closure management of spent PLS drain down. Will the residual drain down be initially evaporated in place followed by disposal in one of the open pits? Draindown rates will decrease dramatically in the first few months/years but will continue to flow at very small rates for many years.

ADEQ Response: The documentation provided as part of the APP permit application includes a proposed closure plan. This component of the application includes conceptual plans for

draindown from the heap leach pad. Specifically, it states "Draindown from the heap leach pad will have begun during operations after cessation of active leaching. By the end of mining and processing at the Copper World Project, draindown from the heap leach pad will likely transition from active evaporation to passive evaporation. The PLS Pond and heap leach facility (HLF) North Stormwater Pond will be converted to evaporation cells for long-term management of drain down."

The APP permit requires the Permittee to update the closure plan every six years based on site-specific data in the HLF Heap Leach Draindown Estimator (HLDE) Model. This includes parameters such as saturated hydraulic conductivity, residual water content, and saturated moisture content, which must be incorporated into updates to the closure plan. Updating the draindown with site-specific data helps to understand the impact of the draindown during closure and post-closure monitoring.

3.10. Contingency Plan

1. Commenters expressed concern about the draft permit allowing Hudbay up to five days to report contamination or violations, which may result in a potential increase or spread of contamination during this period of time.

ADEQ Response: Pursuant to A.A.C. R18-9-A207(A), permittees are required to notify ADEQ within five days after becoming aware of a violation of a permit condition or that an alert level was exceeded and must inform the Agency whether the contingency plan described in A.A.C R18-9-A204 was implemented. In A.A.C R18-9-A207(B) and in Section 2.6.6 of the APP permit, titled Corrective Actions, the permittee is required to initiate corrective action in the event of an exceedance of an alert level (AL), aquifer quality limit (AQL), discharge limit (DL) or other permit condition occurs, including but not limited to: control of the source of an unauthorized discharge, and cleanup of any impacted soils, surface waters, and any impacts to aquifers.

The Permittee is required to notify ADEQ within five days of becoming aware of an exceedance of an AL, AQL, DL or other permit condition, they are also required to notify ADEQ within 24 hours of becoming aware of unauthorized discharge and propose corrective actions based on A.A.C. R18-9-A204. The 24-hour notification is to ensure that potential contamination is identified, and corrective actions are taken to prevent the migration of unauthorized discharge(s) and remediate any impacts.

2. Commenters expressed concern that Hudbay's Emergency Response and Preparedness Plan for tailings dam failure response lacks details on which local authorities should be notified. This plan requires more detail on notification actions and procedures, including identifying the fire department and Pima County's Office of Emergency Management, availability of testing results, remedial measures to be implemented, and potential shutdown of mine operations.

ADEQ Response: ADEQ's APP permit requires a Contingency Plan in accordance with A.A.C. R18-9-A204 and requires the Permittee to take actions in the event that discharge results in a violation of a AQL, DL, aquifer water quality standard (AWQS), other permit conditions or poses an imminent and substantial endangerment to the public health or the environment. While the Contingency Plan may not specifically reference a tailings dam failure and has broader applicability, the submitted Emergency Response and Preparedness Plan (EPRP), which exceeds Arizona's regulatory requirements under the APP, includes specific actions related to tailings dams.

The legally required Contingency Plan and the EPRP have overlapping components. The submitted Contingency Plan provides details that meet legal requirements. In addition to remedial actions and testing requirements, the Contingency Plan and EPRP both include actions the Permittee will take related to notifications in the event of a failure of a tailings storage facility (TSF).

3.11. Cultural Resources

1. ADEQ received several comments regarding the potential cultural resource impacts from the mine such as negative effects on both the natural environment and cultural resources, and the importance of preserving historical and archaeological sites.

ADEQ Response: ADEQ respects the concerns for protecting historical and cultural resources In Arizona. To this end, ADEQ engaged in stakeholder involvement both formally and informally during the review of the Individual APP permit application, including Tribal engagement and consultation. ADEQ is also aware that Copper World, Inc. the Permittee, is engaging with the State Historic Preservation Office to ensure that historic and cultural resources are addressed according to State law. The APP solely regulates discharges of pollutants to Arizona's groundwater to protect groundwater quality. ADEQ does not have the legal authority to address concerns regarding historic and cultural resources through the APP.

3.12. Draft Permit Comments

1. Commenters expressed concern about the draft APP permit's Annual Registration Fee Flow Rate: 10,000,000 gallons per day (gpd) or more (influent) for Hudbay's Copper World Complex, totaling close to four billion gallons per year. Commenters questioned how that fee flow rate is derived and what it means.

ADEQ Response: A.R.S. Section 49-242 describes the requirement for annual registration fees. ADEQ uses the volume of fluids managed at the permitted facility to set the annual registration fee flow rate. The fee flow rate does not reflect a volume discharging to the environment, but rather provides a way to estimate volumes for the purpose of establishing an annual permit fee.

2. Commenters highlighted that the APP permit should explicitly prohibit the relocation of mine materials to off-site locations for construction purposes due to potential environmental risks and long-term damage caused by heavy metal leaching.

ADEQ Response: The APP, as designed by state law, solely regulates discharges of pollutants to groundwater to protect water quality, and does not have the legal authority to regulate off-site uses of mined materials.

Additionally, the Mine's APP application does not indicate that the Permittee plans to shop mining materials offsite. In the event the Permittee plans to utilize such materials off-site for any number of reasons, the Permittee would be required to evaluate the permitting implications and regulatory provisions relevant for such activities.

3. Commenters brought up that Hudbay has not yet applied for necessary Bureau of Land Management (BLM) permissions for construction activities (the tailing slurry pipeline, the tailings seepage return pipeline, and re-construction of the tailing facility roadway) on federal land, raising concerns about the legality of state permits and potential impacts on federal or state requirements.

ADEQ Response: The APP, as designed by state law, solely regulates discharges of pollutants to groundwater to protect water quality, and does not have the legal authority to require that other state or federal permits be in place. Any other federal or state requirements or permits that necessitate changes to the current APP permit would require an amendment be submitted to ADEQ for review and approval.

4. Commenters believe that it is intentionally and inappropriately misleading to say this is a permit for a 15-year project, when the actual term of the permit is valid until suspended or revoked by ADEQ. Phase 2 spanning over 30 years, contingent upon acquiring federal permits previously obstructed during the permitting process for the Rosemont Copper project. Commenters suggested an extended operational timeline of up to 45 years, with the company's need to revisit ore bodies due to spatial constraints on federal lands. Commenters also requested that the permit be limited to the operation of the concentrator for Phase 1 alone, as Hudbay confirms the exclusion of the heap leach facility from their current operational plan, aligning with their 2023 Pre-Feasibility Study (PFS), with the potential for its addition through an amendment in the future.

ADEQ Response: ADEQ processed the APP permit application received in 2022. Table 1 of the permit lists all the facilities covered by the APP permit. Any changes to these discharging facilities, including design changes associated with potential future phases, require the Permittee to submit an amendment application to ADEQ for review and approval.

In the APP permit application, the Permittee estimated a 15 year operational life of the facility. By law the APP permit is issued for the lifetime of the facility, regardless of the estimated operational life. However, if any new or expanded facilities are proposed, including potential future facilities on federal land, a permit amendment will be required.

5. Commenters requested that ND-GS-05 Tailings Slurry Pipeline(s) be included in the APP permit Commenters stated that no design has been submitted, and the location is unclear. The APP application merely states it will be double-walled and operated so as not to discharge. Both the tailing slurry pipeline and return pipeline have the potential to create large discharges to the aquifer. Other commenters expressed a desire for continuous monitoring of the tailings slurry pipeline in order to detect leaks. Commenters also requested that exemptions not be granted for the following facilities: NP-PS-20-Bulk Cu/Mo thickener, ND-PS-23-Tailings Thickeners, and ND-PS-26-Concentrate Leach Fine Grinding Plant. As noted by ADEQ in their letter of April 21, 2023 on page six of 43, these facilities have the potential to overflow or discharge.

ADEQ Response: The ND-GS-05 Tailings Slurry Pipeline(s), NP-PS-20-Bulk Cu/Mo thickener, ND-PS-23-Tailings Thickeners, and ND-PS-26-Concentrate Leach Fine Grinding Plant are exempt

from the APP based on A.R.S. Section 49-241, A.R.S. Section 49-250 (6) and A.R.S. Section 49-250(22). These exemptions apply to the following facilities:

- Facilities used solely for surface transportation or storage of groundwater, surface water for beneficial use, or reclaimed water that is regulated pursuant to Section 49-203, Subsection A, Paragraph 7 for beneficial use.
- Pipelines and tanks designed, constructed, operated, and regularly maintained so as not to discharge.

Therefore, these facilities are exempt because they store or transport groundwater and are designed, constructed, operated, and regularly maintained so as to not discharge. In the event of any discharge or spill via these facilities, the permittee must notify ADEQ within five days and propose to ADEQ corrective action based on A.A.C. R18-9-A204. The permittee must also inform ADEQ of any unauthorized discharge within 24 hours of discovery per section 2.6.5.2 of the permit. Pursuant to A.R.S. Section 49-201(12) any discharge of suspected hazardous substances (A.R.S. Section 49-201(21)) or toxic pollutants (A.R.S. Section 49-243(I)) on the facility site, the permittee must promptly isolate the area and attempt to identify the discharged material. ADEQ reserves the right to modify monitoring requirements if deemed necessary at any monitoring location or discharging facility as the result of a spill.

6. Commenter suggests that even if it is not an APP facility, the Pollutant Management Area for Phase 1 should include the entire East Pit and the headwaters of small streams near the Broadtop Butte and Copper World pits to provide the best chance of detecting contaminants.

ADEQ Response: The current pollutant management area (PMA) delineation conforms to statue A.R.S. Section 49-244(1) states:

> "The pollutant management area is the limit projected in the horizontal plane of the area on which pollutants are or will be placed. The pollutant management area includes horizontal space taken up by any liner, dike or other barrier designed to contain pollutants in the facility. If the facility contains more than one discharging activity, the pollutant management area is described by an imaginary line circumscribing the several discharging activities."

The current East/Rosemont Pit does not meet the definition of a "discharging facility" in A.R.S. Section 49-201, therefore it is not within the PMA (Figure 36 of the permit application) However, the Permittee has agreed to install and sample two additional downgradient

monitoring wells to detect pollutants east of the East/Rosemont Pit. The PMA cannot extend to the headwaters of the referenced streams as they do not fit into the definition of the PMA.

7. Commenters expressed concerns that incomplete surveys of shafts, adits, and previous boreholes pose a risk to the integrity of waste and tailings disposal systems, prompting Pima County to request that the APP permit mandate a comprehensive survey to identify these voids, highlighting the necessity for a thorough assessment to minimize pollutant movement to the aquifer and ensure environmental protection.

ADEQ Response: The Permittee will properly survey and close open shafts, adits and other open boreholes as part of foundation preparation, which also encompasses the inspection and sealing of underground mine workings. The Permittee will also address other facilities where settlement might be a concern. The APP permit requires a 30-day notice to be submitted to ADEQ prior to construction in the affected area including a closure report for adits and mine shafts inside the tailings storage facilities (TSFs) and heap leach facility (HLF) footprints.

8. Commenters critiqued the discharging facilities and sought clarification of what goes into each facility, where overflows/upsets go, transport method (pipeline, spillway, etc.) and at what rate. For example, Section 2.1.1.1. describes that tailings will be placed there using a started dam, the centerline method and hydro-cyclones, and an underdrain seepage collection system; however, it does not say that the reclaimed water goes to the Primary Settling Pond (PSP) nor does it identify how water from TSF-1 is transported to AR-TF-03. Figures 4 and 5 (Application, Appendix A) show a buried tailings pipeline (ND-GS-05) that takes materials to TSF-1. Is there another pipeline transporting the reclaimed water from a lower elevation to the invert of AR-TF-03? Given that the recovery system is essential to prevent oversaturation resulting in tailings failure or runoff of contaminated water, this information must be added to the draft permit. The rate, or range of rates, is important to verify the design components are sized to function properly.

ADEQ Response: The APP, as designed by state law, solely regulates discharges of pollutants to groundwater to protect water quality, and does not have the legal authority to require the Permittee to provide the details on transportation, overflow, or upset conditions.

The pipelines and tanks are designed, constructed, operated, and regularly maintained to be non-discharging facilities. In the event of any unauthorized discharge or spill via these facilities,

the permittee must notify ADEQ within five days and propose a corrective action based on A.A.C. Section R18-9-A204, Contingency Plan.

The Permittee plans to convey tailings seepage water from the seepage collection system to the Primary Settling Pond. Seepage may also be pumped to decant ponds on top of the tailings storage facilities (TSFs) during upset conditions. The pipeline from TSF-1 to the Primary Settling Pond will follow the same path as the tailings slurry line detailed in Figures 3 and 4 of the September 2022 APP permit application. Flow rate estimates and tailings contents were outlined in the September 2022 APP permit application and subsequent submissions. ADEQ has included several compliance schedule items (CSI) (see CSI 4, 8, 22, and 25) and alert levels (ALs) on the piezometers in the permit to ensure tailing safety throughout the facility's operational lifespan.

9. Commenters expressed concerns regarding draft permit expiration is not clearly stated and conflicts with previous plans.

ADEQ Response: Pursuant to A.A.C R18-9-A213 APP permits are issued for the operational life of the facility and therefore do not have expiration dates. The permit requirements remain in force unless the permit is modified, revoked, or terminated.

10. Commenters requested that ADEQ require additional permit conditions, requirements and Agency reviews detailed in the technical comments submitted by Pima County staff to ADEQ on March 11, 2024.

ADEQ Response: ADEQ has reviewed the technical comments submitted on March 11, 2024 by Pima County staff and modified the permit as appropriate in accordance with state laws and regulations. Please refer to the section titled "Description of the Changes to the Individual APP permit" which outlines the modifications made to the permit after the public comment period. ADEQ added two groundwater monitoring well locations east of the East/Rosemont Pit directly in response to these comments.

3.13. Drought and Climate Change

1. ADEQ received several comments regarding the drought and climate change impacts from the mine including concerns about Arizona's fragile desert ecology, permitting mining projects during a water crisis, a recommendation regarding recycling copper in the context of climate change, faulty water balance modeling assumptions and the

failure to consider recent data on climate change in permit assessments, consideration of uncertain future climate conditions, reduced Colorado River CAP allotments due to climate change, and the necessity of a new mine given existing resources and environmental concerns exacerbated by climate change.

ADEQ Response: The APP, as designed by state law, solely regulates discharges of pollutants to groundwater to protect water quality, and does not have the legal authority related to climate change. However, it is important to note that all associated facilities are required to be designed to comply with performance levels during a 100-year/24-hour storm event. Changes to the climate within this time period factor into an applicant's demonstration and ADEQ's review and approval process. These reviews and approvals are based on APP regulations with the objective to protect groundwater quality and do not contemplate water crises, water supply, ecology, or the motivations of secondary markets that drive copper recycling. For additional information on this matter, please refer to the Groundwater Quantity/Supply Section 3.16.9 and Sitewide Water Balance Sections 3.23.

3.14. Financial Assurance and Bond

1. Commenters expressed concern that there is no requirement for a multi-million/billion dollar bond to ensure financial resources are available to address potential issues caused by mining activities in the event the Permittee goes into bankruptcy or abandons the site.

ADEQ Response: ADEQ's authority under A.R.S. Section 49-243(N)(3) requires an applicant to "demonstrate financial responsibility to cover the estimated costs to close the facility and, if necessary, to conduct post closure monitoring and maintenance". The financial assurance mechanism for the Mine must be provided before operation of any facilities and has been determined by ADEQ to be adequate to conduct closure and post-closure activities detailed in the approved closure and post-closure plan. The total financial responsibility amount is $97,100,000. This consists of an estimated closure cost of $26,600,000, and post-closure cost of $70,500,000.

ADEQ notes that the APP permit did not include a compliance schedule item for the Permittee to submit the financial assurance mechanism prior to placement of any pollutants on any facility listed in the permit as per A.R.S. Section 49-243(N)(6). The permit has been updated accordingly

to include a condition which does not allow the operation of any APP permit regulated facilities until ADEQ has approved the financial assurance mechanism for the facility.

As per A.A.C. R18-9-A207(C), the Permittee must notify ADEQ within five days after filing for bankruptcy.

2. Commenters expressed concerns for significant expense that taxpayers would incur for cleaning up contamination resulting from mining activity. Commenters also asserted that companies should provide upfront bonds for cleanup costs, rather than taxpayers bearing the burden.

ADEQ Response: According to A.R.S. Section 49-243(N)(6), ADEQ mandates that the permittee submit financial assurance before introducing any pollutants into facilities listed in the permit. Regulations outlined in A.A.C. R18-9-A203 and A.R.S. Section 49-243 provides criteria and rules for remedial actions, allowing ADEQ to use financial assurance funds for cleanup efforts in cases of bankruptcy. The financial responsibility options or mechanism for APP permits can be found in A.A.C. R18-9-A203(C) or on the ADEQ website. The Permittee has committed to a Surety Bond as the financial assurance mechanism and will provide that mechanism in accordance with compliance schedule item (CSI) 26.

ADEQ requires a financial assurance mechanism (FAM) in one of the forms listed in A.A.C. R18-9-A203(C) to cover the closure cost if the Permittee can attain clean closure as defined by A.R.S. Section 49-201(5). If clean closure cannot be achieved, ADEQ requires the FAM to include the costs associated with post-closure activities until clean closure can be achieved. Please refer to the Contingency Plan, Financial Assurance and Bond, and Closure and Post Closure Monitoring Period Sections for more details.

3. Commenters expressed concern over the lack of closure plan.

ADEQ Response: As per A.A.C. R18-9-A202(A)(10), an applicant for an APP permit is required to submit closure and post-closure strategies or plans. The closure strategy can be found in Appendix M, Conceptual Closure Plan, and was determined to meet regulatory requirements under A.R.S. Section 49-243(8) which requires a 'closure strategy' in the APP permit application. It is important to note that a "closure strategy" is a high-level approach to closure, providing an overall framework with less specificity than a detailed "closure plan." Per A.R.S. Section 49-252 and A.A.C. R18-9-A209(B)(3), a closure plan is required to be submitted within 90 days of notification of closure. The Permittee is also required to maintain a financial mechanism for any

revised costs as a result of the closure and post-closure activities approved in the closure plan, and provide a financial mechanism as specified in A.A.C. R18-9-A203(C).

4. Commenters asked about personal and corporate guarantees from the parent company, insurance, or setting aside funds in trust based on the value of the copper harvested.

ADEQ Response: Financial assurance obligations for an APP permit is required pursuant to A.A.C. R18-9-A203(C)(3) and A.R.S. Section 49-243. The Permittee has committed to utilizing the Performance Surety Bond as the FAM in their financial capability demonstration. A Performance Surety Bond is a FAM held by a third party financial institution that ensures that resources are available to the State to close the facility should any unforeseen circumstances result in permittee bankruptcy or defaults on other loans that would impact the ability of the company to fund closure related activities. In the event that a corporate structure is in place that has multiple ventures operating under different entity names, ADEQ can pursue legal actions which include but are not limited to associated corporate entities of the named applicant.

3.15. Hudbay as a Foreign Company

1. ADEQ received several comments regarding permits granted to a foreign-owned business, prioritizing foreign interests over the environment and quality of life and the long-term consequences of foreign mining on community health and the environment.

ADEQ Response: ADEQ does not have authority under the APP to make permitting decisions based on the nationality of an applicant. For an Individual APP permit application to be reviewed through the formal administrative and substantive review processes by ADEQ, an applicant must be legally registered with the Arizona Corporation Commission (ACC) and in good standing. According to the ACC website, Copper World, Inc. is legally registered in Arizona and is in good standing.

Any company, foreign or domestic, permitted through an Individual APP permit is required to demonstrate that they have the financial capacity to operate and properly close the facility. Per A.A.C. R18-9-A203, a person applying for an individual permit must demonstrate financial capability to construct, operate, close, and ensure proper post-closure care of the facility in compliance with A.R.S. Title 49, Chapter 2, Article 3.

3.16. Groundwater

Commenters expressed a variety of concerns related to groundwater. Concerns have been categorized in order to effectively address and respond to subtopics raised by commenters:

- The Permittee will be responsible for self-monitoring and reporting groundwater conditions and exceedances. (SM&R)
- Ambient baseline groundwater conditions have yet to be assessed. (Ambient)
- Concerns with the proposed Points of Compliance (POC).
- Potential influence on existing groundwater quality. (Quality)
- Use of a finite water resource. (Quantity)

ADEQ Response: Please refer to the relevant sections in this document for ADEQ responses on Self-monitoring, Ambient (baseline), Water quality monitoring, POC wells, Quality and Quantity.

3.16.1. Self-Monitoring and Reporting

1. Commenters expressed criticism of self-monitoring and reporting, and expressed a general lack of trust in self-reporting mechanisms and reporting timeframes and requested public access to the reported data.

ADEQ Response: Most federal and state public health and environmental programs, including those under the Clean Water Act (CWA), , Clean Air Act, and Safe Drinking Water Act, require permittees to conduct self-monitoring as part of their compliance obligations.

ADEQ's APP has over 450 permits with active monitoring statewide, all of which involve self-monitoring reporting. Based on A.A.C. R18-9-A206, ADEQ determines the necessary monitoring to assure compliance with permit conditions and applicable aquifer water quality standards (AWQS). The APP permit specifies the type and method of monitoring, reporting frequency, and reporting interval. ADEQ has stipulated these terms and conditions in the APP permit framework which requires sampling plans, the utilization of Arizona Department of Health Services certified laboratory analysis, Quality Assurance/Quality Control (QA/QC), and Chain of Custody. Self-monitoring is an effective way for a permittee to perform the monitoring and reporting actions necessary to ensure compliance with the permit and protection of public health and the environment. Additionally, ADEQ has the authority to inspect and take samples at any time.

In addition to the annual groundwater quality monitoring and reporting requirement described in the APP permit Section 2.7.4.2, Section 2.7.3 requires the Permittee to notify ADEQ of any exceedance or violation of established aquifer quality limits (AQLs), discharge limits (DLs), or alert levels (AL's) within five days of becoming aware. The permittee will be required to submit a written report to ADEQ within 30 days describing the violation, cause, duration, corrective actions, monitoring practices, and follow an accelerated monitoring schedule until the alert status is cleared.

ADEQ acknowledges commenter concerns regarding public availability of groundwater monitoring data. ADEQ is developing a strategy to publish the results of the sampling data to ADEQ's Copper World, Inc. Water Permit of Interest web page

2. Commenters doubt Hudbay's commitment to honesty in reporting water quality measurement that may result in enforcement actions due to perceived conflict of interest.

ADEQ Response: ADEQ's regulatory programs are designed to ensure accurate reporting of data and any violations to the Agency. The Director is required to specify the type and method of monitoring, the reporting frequency and the reporting interval. These terms and conditions are stipulated in the Aquifer Protection Program (APP) permit. The APP permit requires specific sampling plans, the use of Arizona Department of Health Services-certified laboratories for analysis, Quality Assurance/Quality Control (QA/QC) procedures, and Chain of Custody protocols.

The QA/QC process ensures that laboratory test procedures and methods are accurate and precise within acceptable limits set forth by the Arizona Department of Health Services. The Chain of the Custody process ensures that the transport and delivery of the sample to the certified laboratory has been accounted for in all steps prior to analysis. ADEQ's compliance and enforcement program routinely requests laboratory data to ensure that facilities are complying with monitoring and reporting requirements to prevent inaccuracies in self monitoring reporting. If a permittee reports data in a manner that is unlawful the permittee is subject to the enforcement actions established under A.R.S. Section 49, Chapter 2, Article 4.

Additionally, ADEQ has the authority to independently collect samples, separate from the permittee's obligation to perform sampling and analysis. ADEQ may also observe sampling

activities at facilities to ensure that proper procedures are being followed, from the sampling event to the laboratory transport and analysis.

3. Commenters requested that ADEQ or an independent third party conduct regular audits of reported values, inspections, and verification sampling to ensure accuracy of results while increasing oversight and involvement. Commenters suggested including a requirement in the permit.

ADEQ Response: ADEQ acknowledges concerns relative to self monitoring. ADEQ regularly reviews sampling results and conducts inspections of APP regulated facilities. ADEQ also has the authority to conduct sample collection and analysis at any time.

4. Suggestion to involve independent laboratories and enhance public notification protocols if/when monitoring indicates an exceedance.

ADEQ Response: Per Section 2.5.6 of the APP permit, all samples collected for compliance monitoring must be analyzed using Arizona state-approved methods. If no state-approved method exists, an appropriate EPA-approved method must be used. Regardless of the method used, the detection limits must be sufficient to determine compliance with the regulatory limits of the parameters specified in this permit. All analyses must be performed by a laboratory licensed by the Arizona Department of Health Services, Office of Laboratory Licensure and Certification, unless exempted under A.R.S. Section 36-461.

ADEQ has verified licensure of the laboratory that will be responsible for analyses and can verify monitoring results by independently sampling monitoring wells and requesting analyses to confirm results. The Permittee currently uses Turner Laboratories, Inc., which is licensed by the Arizona Department of Health Services (License #AZ0066) to perform environmental laboratory testing. In the event that the Permittee changes the laboratory that they use in the future, they are required to use a laboratory that is licensed by the Arizona Department of Health Services.

For public notification, ADEQ's "My Community" tool provides information about AWQS exceedances for all APP-regulated facilities. "My Community" was created to offer information about environmental issues and actions taken to address them within your community. For more information on how to use this tool, visit: https://www.azdeq.gov/MyCommunity.

3.16.2. Ambient (Baseline) Groundwater Monitoring

1. Commenters request that ADEQ require the Permittee to determine natural contaminant levels over a two-year water quality testing period before a decision to issue the APP permit is made and before site construction begins.

ADEQ Response: Ambient monitoring to determine the natural background of constituents and for use in the establishment of alert levels (ALs) and aquifer water quality limits will be completed prior to any potential discharge of pollutants. The Permittee is required to submit this data to ADEQ for review, and the results will be incorporated into the permit as limits. Under the authority of the APP as outlined in the statute and rule, an APP permit can be issued with the condition that ambient monitoring is conducted to establish baseline groundwater quality before any discharges are permitted to occur.

2. Commentors criticized the processes that allowed Hudbay to delay setting water quality limits and alert levels until after eight quarterly baseline samples have been collected and analyzed, asserting the practice potentially allows for two years of unregulated contamination.

ADEQ Response: Under A.R.S. Section 49-201(12), a "discharge" is not permitted until after the baseline water quality is established and the permit is amended to set groundwater ALs and aquifer quality limits (AQLs).

3. The APP permit application process lacks sufficient safeguards, such as baseline water quality testing and timely public notification of contamination events, raising questions about ADEQ's commitment to protecting the environment and public health.

ADEQ Response: The Permittee is required by the permit to conduct sampling and analysis through the ambient monitoring period before any discharging activities that could affect the aquifer begin. After completing the ambient monitoring, the Permittee must submit a report summarizing the ambient groundwater monitoring results for ADEQ's review. Based on these results, the ALs and AQLs will be established for each Point of Compliance (POC) monitoring location as outlined in Section 2.5.3.3 of the APP permit.

Whether or not existing aquifers currently meet aquifer water quality standards (AWQS), ADEQ sets calculated AQLs to protect groundwater quality to ensure that the facility operations do not further degrade the current aquifer conditions. According to A.A.C. R-18-11-119, natural

background, where the concentration of a pollutant exceeds a water quality standard and the exceedance is not caused by human activity but is due solely to naturally-occurring conditions, the exceedance is not considered a violation of the water quality standard.

ADEQ is developing a strategy to publish the results of the sampling data to ADEQ's Copper World, Inc. Permit of Interest page.

4. One commenter expressed concern arising from the impression that Hudbay's monitoring shows significant copper seepage into groundwater, requiring extensive monitoring across town.

ADEQ Response: It is unclear what monitoring data the commenter is referring to regarding pre-existing monitoring at wells near the Mine and neighboring communities. ADEQ has reviewed all available data and has no evidence of monitoring showing significant copper seepage into the groundwater. ADEQ is also unaware of any monitoring happening across town.

While ADEQ is unaware of the referenced groundwater monitoring, the Permittee is required by the APP permit to initiate ambient (baseline) groundwater monitoring as described in Section 2.5.3.2 of the APP permit. A POC well monitoring network will also be established. These POC wells are located downgradient of the facility and are monitored to verify that permit limits are met to protect groundwater quality.

5. Concerns expressed regarding the importance of verifying monitoring wells used for establishing baseline water quality measurements are constructed as designed to ensure monitoring efforts are representative.

ADEQ Response: ADEQ agrees that appropriate well design and construction are important to ensure quality monitoring data. Compliance schedule item (CSI) 12 requires the Permittee to submit a POC well installation proposal for ADEQ review and approval prior to well installation. This is to ensure that the construction and design details are adequate for compliance monitoring. At a minimum, the proposal must contain the following: well construction diagrams, proposed locations (latitude and longitude), and a proposed installation schedule. The submittal must be sealed by an Arizona Registered Geologist or other qualified registrant.

Construction of the POC wells listed in Table 2 of the APP permit must commence within 60 days of approval per CSI 13, and collection of ambient groundwater monitoring data at the facility must begin within 30 days of well construction per CSI 14. The discharge limits will be

established in the APP permit once the Permittee completes a minimum of eight rounds of ambient groundwater monitoring and submits an ambient monitoring report described in CSI 15 in accordance with Section 2.5.3.3 of the APP permit.

3.16.3. Groundwater Monitoring - Point of Compliance (POC) Wells

1. Commenters requested that ADEQ require Hudbay to install point-of-compliance wells before authorizing construction and setting aquifer quality limits and alert levels at permit issuance.

ADEQ Response: The APP permit requires the Permittee to submit a POC well installation proposal for ADEQ review and approval prior to well installation. This is to ensure that the construction details and designs are adequate for compliance monitoring. Ambient monitoring to determine the background of constituents and for use in the establishment of alert levels (ALs) and aquifer water quality limits will be completed prior to any potential discharge of pollutants. The Permittee will be required to submit the data to ADEQ for review and incorporation of limits into the permit, all prior to the discharge of pollutants.

2. Commenters inquired about monitoring methods for open pit areas and monitoring well locations.

ADEQ Response: Open pit areas will be monitored primarily with water elevation data collected from monitoring locations in and around the pits, routine inspections of the pit walls, surveying the surface elevation of water if present, and monitoring slope stability. Regulated pits are subject to both daily and quarterly inspections of pit slopes in active areas and maintenance of sump levels in accordance with operational criteria, and are monitored quarterly with downgradient POC groundwater monitoring wells.

With the exception of the East/Rosemont Pit, pit lakes are not anticipated to form. A pit lake is anticipated to form within the East/Rosemont Pit after mining excavation reaches below the water table elevation. The East/Rosemont Pit will not receive backfill, and is exempt from the APP because it meets the exemption criteria in A.R.S. Section 49-250 (B).

Monitoring methods at POC wells are listed in Section 2.4 of the permit and include but are not limited to volume-based well sampling, low-flow sampling, or accepted no-purge sampling techniques. The method used at a given monitoring location will depend on the groundwater

flow and recovery rate of the specific well and must be noted on the field form corresponding with sample collection. If a POC monitoring well becomes unusable, inaccessible, or is for any reason unable to be sampled for three consecutive sampling events, a replacement POC well must be constructed and installed upon approval by ADEQ per Section 2.5.3.1 of the permit.

3. Commenters expressed concern over the undefined locations of upgradient companion wells associated with POC wells and requested that ADEQ extend the area of downgradient monitoring in an effort to improve definition and effectiveness of monitoring activities in areas without existing wells that will be near new mine facilities and waste areas.

ADEQ Response: Compliance schedule item (CSI) 12 and Section 2.5.3.6 require the Permittee to "submit a well construction and installation proposal for the POC wells and upgradient companion wells prior to installation. At a minimum, the proposal must contain the following: well construction diagrams, proposed locations (latitude and longitude), and a proposed installation schedule." ADEQ will review these construction proposals and may approve them or require additional monitoring locations if the proposed monitoring well locations are determined to inadequately characterize groundwater quality.

The objective of groundwater monitoring under the Individual APP permit is to demonstrate and verify compliance with specified requirements and to identify potential releases to groundwater from the Mine and require corrective action as necessary. POC wells locations are chosen based on the facility's pollutant management area (PMA) footprint and groundwater flow direction and are placed at the downgradient edge of areas impacted by discharging activities to protect downgradient uses. ADEQ has determined that the POC monitoring network meets the requirements of the APP. In the event ADEQ determines in the future that the POC monitoring network is inadequate, ADEQ can require the installation of additional monitoring wells. If ADEQ finds evidence that groundwater contamination is (or could be) occurring, the Agency has the legal authority to require the installation of additional monitoring wells and corrective action.

While ADEQ has determined that the POC monitoring network meets the requirements in statute and rule, the Permittee has agreed to install and sample two additional non-POC monitoring wells to the east and downgradient of the East/Rosemont Pit. ADEQ has included these additional monitoring locations to the permit.

Although the exact locations of companion wells listed in permit Table 3 in Section 2.5.3.6 remain to be determined, this table will be updated with the coordinates, construction details, and distances to associated POC wells after they are installed. Groundwater quality data at upgradient wells will be collected according to the same schedule and constituents established for the associated POC wells. Companion wells that the Permittee has agreed to include in the APP permit Section 2.5.3.6 are upgradient of POC wells and within the PMA and provide an added level of early detection that will inform the Permittee and ADEQ of any changes in groundwater quality that may result in corrective actions should sample results indicate a potential impact to the aquifer.

4. Commenters requested two additional point-of-compliance wells to ensure that the east-side aquifer isn't impacted by operations at the east pit as the Pollution Management Area does not include the east pit and the headwaters of small streams near the Broadtop Butte and Copper World pits. Commenters suggest the east pit will be a discharging facility and require associated point of compliance POC wells along the Backbone fault until dewatering efforts establish the pit as a hydraulic sink.

ADEQ Response: The East Pit the commenters refer to is likely the East/Rosemont Pit. While ADEQ has determined that the POC monitoring network meets the requirements in statute and rule, the Permittee has agreed to install two additional non-POC monitoring wells to the east and downgradient of the East/Rosemont Pit. ADEQ has included these additional monitoring locations to the permit. They are not POC wells because it was determined that the East/Rosemont Pit is exempt from the APP because it meets the exemption criteria in A.R.S. Section 49-250(B).

3.16.4. Groundwater Monitoring - Frequency

1. Commenters assert the proposed groundwater monitoring plan should include continuous monitoring systems and that the proposed methods are inadequate to protect the aquifer from contamination by heavy metals and other toxins. Commenters requested that the constituents listed in Table 20 be sampled for twice per year instead of once every two years and that facility wastewater is sampled for contaminants.

ADEQ Response: Based on A.A.C. R18-9-A206, the Department must determine whether monitoring is required to assure compliance with APP permit conditions and with the applicable aquifer water quality standards (AWQS) established under A.R.S. Section 49-221, 49-223, 49-241

through 49-244, and 49-250 through 49-252. ADEQ has established monitoring requirements which specify the frequency of sampling events based on a number of technical considerations such as: discharge characterization, fate and transport, hydrogeological conditions of the site, and existing groundwater quality to be determined through ambient (baseline) groundwater sampling.

The constituents in Table 20 include volatile organic compounds (VOCs) and radiochemicals that are not expected to be present in the facility's discharge. In the event that sampling results exceed an alert level (AL) or established aquifer quality limit (AQL), the permittee is required to initiate accelerated monitoring pursuant to Table 4 of the permit.

ADEQ has determined that retaining the biennial monitoring frequency is protective of groundwater quality and more frequent monitoring is not supported based on the facility type, discharge characterization, and site conditions.

3.16.5. Groundwater Quality

1. Commenters inquired about the purpose and scope of the APP permit statement on the Copper World, Inc. Permit of Interest webpage: "to ensure mining activities are undertaken and operated in a manner that eliminates or minimizes the impact on groundwater quality". The statement can be interpreted to mean treatment that eliminates impact after the groundwater is contaminated and treatment that minimizes impact. Commenters suggest revising the statement to explicitly prioritize avoiding groundwater quality impact and minimizing contamination volume and extent during mining operations.

ADEQ Response: As designed by state law, the APP is a preventative program and requires an applicant to demonstrate that a proposed facility will be designed, constructed and operated to prevent degradation of the aquifer's water quality for the life of the facility, including closure and post-closure.

2. Many commenters expressed doubt in the company's assurances that groundwater quality would not be impacted and are concerned about continued use of privately owned wells. Commenters emphasized the importance of protecting the quality of Tucson's water supply that many residents rely on and that homeowners reliant on private wells, if impacted, have limited recourse.

ADEQ Response: ADEQ recognizes the importance of protecting groundwater quality. The APP is designed to ensure groundwater is protected, and does not rely on assurances from the company. The permit issued to the Permittee requires the installation of control measures, requires regular monitoring at point of compliance (POC) wells, regular facility reviews, and regular reporting to ADEQ. In addition, ADEQ has a robust compliance and enforcement process that includes complaint-response inspections, routine inspections, and enforcement actions to ensure the Permittee complies with permit requirements.

3.16.6. Groundwater Flow Model

3. Commenters asserted that the permit and application are based on faulty modeling assumptions and require further review.

ADEQ Response: ADEQ did not receive specific actionable detail on which model assumptions were faulty in the view of the commenters. ADEQ's review of application components and documents received has determined that the groundwater flow modeling performed (including input assumptions) and climate data was adequate to determine groundwater flow direction, point of compliance (POC) well locations, sitewide water balance, and the discharge impact area (DIA). Please see the corresponding sections in this responsiveness summary for additional information on sitewide water balance Section 3.23 , drought and climate change Section 3.13, and groundwater Section 3.16.

3.16.7. Blasting Impact on Private Well

1. One commenter claimed to be experiencing issues with a privately owned well related to exploratory blasting in the past.

ADEQ Response: ADEQ met with the Permittee representatives on June 4, 2024, and confirmed that blasting for the project and facilities covered by the permit have not yet commenced. ADEQ recognizes the concern of private well owners but cannot correlate the issue with this facility.

3.16.8. Site Model/Spatial Relation

1. Commenters requested a detailed site model showing locations of wells, facilities, and storage ponds along with neighboring residential areas and schools.

ADEQ Response: Project figures detailing facility layout, monitoring locations, and tailings facilities were submitted with the Individual APP permit application as attachments and are

available online at the Copper World Permit of Interest web page. After meeting with representatives on June 4, 2024, the Permittee has agreed to produce a map that indicates residential areas and schools closest to the facility to meet commenters' requests. The area map is available online on ADEQ's Copper World Permit of Interest page.

3.16.9. Groundwater Quantity/Supply

1. ADEQ received several comments regarding the groundwater quantity and water supply impacts from the Mine, including concerns about the availability of groundwater resources to surrounding communities and cost increases for water users, fears of water depletion, doubts about aquifer replenishment by Hudbay, prioritizing and protecting Arizona's groundwater resources over mining interests, limits on mining activities to sustain groundwater reserves and reduce further drawdown of the water table, private well production post-mine operation, seeking assurances or remedies for private well owners if static groundwater levels drop, using treated effluent from wastewater plants as a water source for mining operations, growing water requirements as the project develops, and groundwater pumping impacting wildlife and other uses (referencing the Nevada Supreme Court ruling).

ADEQ Response: The APP solely regulates discharges of pollutants to Arizona's groundwater to protect groundwater quality. As such, ADEQ does not have the legal authority to address concerns regarding groundwater depletion in this APP permitting action.

3.17. PAG Areawide Water Quality Management Plan

1. As a Designated Planning Agency for this region under Section 208 of the Clean Water Act (CWA), Pima Association of Governments (PAG) is tasked with the preparation and implementation of the Areawide Water Quality Management Plan (208 Plan) for this region. While the PAG does review some APPs for consistency with the 208 Plan, this APP does not necessarily require a PAG 208 Plan Amendment, and we have not received a request from our member jurisdictions to date to elevate it for a Consistency Review process.

ADEQ Response: In regards to the APP, the PAG 208 plan is applicable to sewage treatment facilities. A.A.C. R18-9-A201(B)(6)(a) states: "Documentation that the sewage treatment facility or expansion conforms with the Certified Areawide Water Quality Management Plan and the Facility Plan".

The application does not include a sewage treatment plant, and therefore Section 208 Consistency Review is not applicable.

3.18. Hudbay Compliance and Human Rights

1. ADEQ received several comments regarding Hudbay's potential impacts on human rights in foreign nations and the implications it may have on the likelihood for the Copper World Project to operate in compliance. Commenters raised concerns that included permitting a company with a history of environmental damage, which jeopardizes the water supply for residents and wildlife, failing to clean up prior mines, providing only temporary jobs, and raising doubts about their commitment to the community. Additionally, commenters highlighted misleading claims about community support for the mine, a lack of consultation with the local government, and underscored the risks associated with allowing Hudbay to operate in Arizona.

ADEQ Response: The Aquifer Protection Program (APP), as designed by state law, solely regulates discharges of pollutants to groundwater to protect water quality.

ADEQ does not have legal authority to address domestic or foreign humanitarian allegations, nor does ADEQ have authority to base licensing decisions on community engagement or the creation of jobs. The Permittee did not disclose any convictions, judgments, injunctions, decrees, or permanent orders stemming from violations of State or Federal environmental law pursuant to A.R.S. Section 49-109. ADEQ does not have any information substantiating concerns with the Permittee's ability to comply with the Aquifer Protection Program (APP) permit per A.R.S. Section 49-243(N)(1).

Any company or person issued an APP permit has the legal obligation to comply with the conditions of that permit. ADEQ uses its compliance and enforcement authority to ensure permit holders comply with all environmental protection permits and regulations. ADEQ has a robust compliance and enforcement process that includes complaint-response inspections, routine inspections, and enforcement actions. These actions include informal enforcement such as Notice of Opportunity to Correct Deficiencies (NOC) and Notices of Violation (NOV) in addition to formal enforcement actions including Administrative Orders and civil and criminal enforcement. These actions may carry a penalty of up to $25,000 per violation per day. Additionally, the APP permit requires the permittee to monitor environmental parameters, keep

appropriate records, and make regular reports to ADEQ, which are reviewed to ensure compliance.

3.19. Opposition

General Opposition

1. Several commenters expressed strong opposition to the operation of the Mine and to mining in general without specific comments on the Individual APP permit.

ADEQ Response: ADEQ acknowledges and appreciates the comments received during the Public Notice period regarding the APP permit for the Mine. The public's interest and engagement in this process is critical to ensuring that the Agency administers the APP permit in a manner consistent with A.R.S. Section 49-243 and other regulatory provisions to ensure that groundwater quality is safeguarded.

Mine Location

2. Concerns about the impacts of locating the mine site and industrial complex in close proximity to residential areas, Metro Tucson and the impact to historically designated ranching and homesteading locations.

ADEQ Response: ADEQ does not have the legal authority under the APP to base permitting decisions on a mine's proximity to metropolitan, residential or historic land uses. As designed by Arizona Revised Statutes and the Arizona Administrative Code, the Aquifer Protection Program (APP) solely regulates discharges of pollutants to groundwater to protect groundwater quality. Existing or future mine sites are determined by geological conditions and the physical location of ore and mineral deposits, which may be in proximity to communities.

ADEQ Jurisdiction

3. Commenters expressed criticism of the use of the Mining Law of 1872 and concern over its implications for Arizona's future, citing outdated mining laws and a lack of protection for natural resources.

ADEQ Response: The Federal law governing locatable minerals is the Mining Law of 1872 (May 10, 1872), which declared all valuable mineral deposits in land belonging to the United States to be free and open to exploration and purchase. The Mining Law of 1872 is irrelevant to the APP program. ADEQ's environmental programs are not based on the Mining Law of 1872 and do not

have the legal authority to address concerns over mineral leases on Federal lands or Federal laws including the Mining Law of 1872. There are multiple federal and state programs designed and implemented to protect natural resources including the APP, the Clean Water Act, National Environmental Policy Act, and the Clean Air Act.

3.20. Public Comment Period Extension / Public Meeting

1. Commenters expressed a desire to extend the Public Notice and comment period to at least 180 days instead of 50 days, hold a public meeting, and a public hearing to allow for more time to review the application components, draft permit and other materials. Additionally, commenters remarked on the duration of time ADEQ had to review the application in justifying their desire to extend the public notice period 180 days. Some commenters requested notice be delivered through social media and broadcasted news platforms in addition to local newspapers.

ADEQ Response: ADEQ strongly supports and encourages public engagement on all Agency actions. For APP permits, state regulations require a public comment period for 30 days according to A.A.C. R18-9-109(A)(3). The public comment period for the Copper World Project began on January 7, 2024 with publication in the *Green Valley News & Sun*.

In response to significant public requests to extend the public comment period, ADEQ extended the comment period to 46 days. Following additional requests, ADEQ further extended the public comment period to a total of 96 days, which ended on April 10, 2024. Notices of these extensions were published in the *Green Valley News & Sun* on February 4, 2024, and March 10, 2024, and on ADEQ's website.
In addition to the public notifications and formal public hearing, ADEQ held a community meeting for the project on February 20, 2024 at Corona Foothills Middle School in Vail, Arizona to hear concerns and questions about the proposed permit. ADEQ held the formal public hearing on March 5, 2024 at Corona Foothills Middle School to accept comments on the permit. Local broadcast media and a reporter from the Arizona Daily Star were present at the meetings, and ADEQ's public information officer facilitated interviews and provided the reporters with the additional requested information for their news coverage.

ADEQ is required by state law to comply with licensing time frames (LTF), which are legal time obligations for ADEQ to make decisions on permit applications. While ADEQ extended the public comment period as much as possible, the Agency also needed to ensure there was sufficient

time to formally respond to all comments and address any changes to the draft permit prior to LTF expiration in August 2024.

3.21. Public Health

1. Concerns were raised about the Copper World mine's impacts on human health, environmental integrity such as clean water, fresh air, natural beauty and long-term consequences of continued mining on the region's well-being.

ADEQ Response: The APP solely regulates discharges of pollutants to groundwater in order to be protective of groundwater quality. While the APP permit does not regulate air quality, an application related to air quality for the Mine is currently under review by ADEQ's Air Quality Division. More information on that can be found at ADEQ's Air Permits of Interest web page for Copper World, Inc. azdeq.gov/aqd/copperworld.

The APP is in place to ensure the facility's design, construction and operation will be protective of groundwater quality, including closure and post-closure. Pursuant to A.R.S. Section 49-243(B)(1), an applicant seeking a permit must demonstrate that "the facility will be designed, constructed and operated to ensure the greatest degree of discharge reduction achievable through application of best available demonstrated control technology, processes, operating methods or other alternatives, including where practicable, a technology permitting no discharge of pollutants."

ADEQ has reviewed the Permittee's application and determined that the best available demonstrated control technology has been incorporated into the facility design. The APP permit requires the facility to utilize engineering controls and actively monitors and specifies operational criteria including but not limited to; visual inspections, monitoring and reporting, corrective actions, spill response procedures, and closure and post-closure actions.

Additionally, ADEQ's robust inspections and compliance unit performs routine and complaint-response inspections to ensure the Permittee is complying with permitted conditions. If the Permittee is not complying with defined requirements, ADEQ utilizes the Compliance Handbook to take appropriate action to resolve any potential impacts to soil, surface water or groundwater.

2. Commenters raised concerns about sulfuric acid being generated on site and the transportation process potentially causing dangers to nearby communities, wildlife, groundwater, and soil contamination.

ADEQ Response: The APP regulates discharges of pollutants to groundwater. The sulfuric acid plant is not an APP regulated facility as it is designed to not discharge. The APP permit does not authorize any discharge of sulfuric acid to the aquifer or land surface. ADEQ does not have legal authority to regulate the transportation of material.

3. Commenters asked about ADEQ statistics on comparable mines in Arizona regarding potential issues and anticipated challenges and risk on human health, especially contamination to air and water to neighboring residential communities.

ADEQ Response: Since its creation in 1986, the APP has issued over 450 Individual APP permits. Currently, the APP regulates 39 active mines in Arizona, some of which have comparable features and facilities as the Copper World Project (the Mine). All 39 mining facilities are required to comply with air and water quality laws. ADEQ conducts regular inspections of these facilities, receives regular monitoring data submittals, and reviews required reports. Mine in Arizona that violate environmental requirements are subject to enforcement actions, remedial activities or both.

Over the last five years, ADEQ has issued six Notice of Violations (NOVs) to mines in Arizona. These violations include:

1) Failure to follow a compliance schedule item: failure to identify post-closure point of compliance (POC) wells, failure to commence post-closure groundwater sampling, and failure to provide post-closure financial assurance.
2) Tears in the upper liner of an impoundment, revealing the second liner, as well as vegetation growth in the pond.
3) Missing sampling results, no daily inspection log book, as well as tears in a liner at the TSF (this facility is a precious mineral mine - see Comment 3.27 # 3).
4) Missing sampling results.
5) A rip in an impoundment liner that was receiving discharges.
6) Unauthorized discharge; leaking PLS onto the ground from a broken pipe.

ADEQ employs the Compliance Handbook to require facilities to promptly address and mitigate potential impacts to soil, surface water, or groundwater. Five of the six NOVs have been closed

as the facilities are back in compliance. To ADEQ's knowledge, none of these violations impacted nearby communities.

3.22. Recreation

1. Opposition to the mine project due to its potential destruction of the natural habitat and biodiverse ecosystem, including the Santa Rita mountains, a popular recreational area.

ADEQ Response: The APP, as designed by state law, solely regulates discharges of pollutants to groundwater to protect water quality, and does not have the legal authority to base permitting decisions on recreational impacts.

3.23. Sitewide Water Balance and Hydrology

1. Concerns were expressed regarding the sitewide water balance assumptions lacking justification and the quantity of water lost to evaporation or the ultimate level of lakes.

ADEQ Response: As part of the sitewide water balance, site-specific climate data was provided in Section 3.2 of the APP permit application dated September 2022. This meteorological data comes from multiple monitoring stations within a 30-mile radius of the project. Additionally, the Permittee has recently installed an on-site weather station to gather specific data and validate assumptions for the water balance analysis. The water balance is presented under three scenarios – dry, average, and wet conditions – to accommodate various situations throughout the facility's operational life. This analysis ensures that the facilities have adequate freeboard to handle specific storm events, including a 100-year, 24-hour event, which is 4.64 inches for this area.

If routine visual inspections, as per Section 2.6 of the APP permit, show that operational performance levels associated with freeboard requirements are above limits, the permittee must initiate root cause analysis to determine what may be causing the issues, and take appropriate corrective actions.

2. Concerns were expressed regarding potential overflow of the pit lakes in Rosemont, Elgin, and Peach Pits.

ADEQ Response: Overflow of the pit lakes is extremely unlikely based on the Hydrogeologic Characterization Study in Appendix F.1 of the permit application. The pit lakes are designed to reach equilibrium with the local groundwater levels and contain water even after dewatering

operations cease at the respective pits. Modeled groundwater elevation at pit locations indicate there is insufficient groundwater head pressure in the aquifer for any of the proposed pit lakes to overflow as the result of groundwater inflow and would thus require substantial input from rainfall or on-site water management.

Upon reaching equilibrium with the groundwater inflow, local annual evaporation rates of approximately 91 inches per year will exceed documented annual precipitation totals of up to 21 inches per year. Evaporation at the water surface will continue and maintain pit lakes' role as evaporative sinks and maintain a local hydraulic gradient inward towards the pit, thereby preventing the migration of pollutants from the pit lake to an aquifer downgradient.

Routine inspections required by Section 2.6 of the permit will ensure that pit lake overflows do not occur and that preventative actions are taken to avoid exceeding the capacity of the pit lakes.

3.24. Socioeconomics

1. ADEQ received several comments regarding the potential socioeconomic impacts from the Mine such as emphasizing the potential destruction of ecosystems, water resources, and wildlife habitats, that the long-term environmental costs outweigh the benefits, economic justification compared to the risks to local communities, property values, quality of life, exporting copper to China and Korea while leaving minimal benefits for Arizona, prioritizing Arizona residents' interests over foreign mining interests, and the potential overproduction of minerals like copper. Additionally, comments were made suggesting that ADEQ's analysis methods do not account for the impact on local communities, including the proximity of the mine to schools and drinking wells. It was recommended that copper and mineral extraction operations be situated farther from large cities and incorporate green technologies to balance local benefits with environmental preservation.

ADEQ Response: The APP solely regulates discharges of pollutants to groundwater to protect groundwater quality. ADEQ does not have the legal authority under the APP to base permitting decisions on the potential socioeconomic impacts from the mine such as need for copper, economic viability of mines, potential impacts to property values, or the proximity to local communities.

ADEQ's review of the permit application did consider impacts to groundwater that could affect nearby wells. The permit includes requirements that are to ensure the protection of groundwater including robust design requirements, construction, operation, maintenance and closure activities. Additionally, the APP permit mandates rigorous monitoring, reporting, operations and maintenance along with necessary corrective actions to address any potential issues.

3.25. Support

1. Some commenters expressed support for the operation of the Mine.

ADEQ Response: ADEQ acknowledges the comments submitted in support.

3.26. Surface Water

1. ADEQ received several comments regarding the potential surface water impacts from the Mine such as lack of surface water monitoring in the permit, surface water pollution downstream during monsoon seasons, toxic runoff for high numbers of residents and elementary school nearby, surface water impacts from sulfuric acid and heavy metals necessitating third-party surface water testing, runoff and seepage from tailings and mining operations, and discharges of pit water to the washes.

ADEQ Response: The APP, as designed by state law, solely regulates discharges of pollutants to groundwater to protect water quality, and does not have the legal authority to regulate discharges to surface water. Discharges to surface waters, including stormwater discharges, are regulated under the Clean Water Act (CWA).

2. Commenters expressed concern over the potential that tailings run-off may travel across adjacent State land containing a canyon where it may render the land uninhabitable for both humans and wildlife.

ADEQ Response: The APP solely regulates discharges of pollutants to groundwater to protect groundwater quality. ADEQ does not have the legal authority under the APP to regulate tailings run-off to downstream areas . Discharges to surface waters, including stormwater discharges, are regulated under the Clean Water Act (CWA).

3. Commenters called for monitoring of surface water on the site to safeguard the aquifer from percolation.

ADEQ Response: The APP solely regulates discharges of pollutants to groundwater to protect groundwater quality. ADEQ does not have the legal authority under the APP to base permitting decisions on the surface water management and monitoring.

3.27. Tailings

1. Commenters raised concerns over the lack of liners for tailings storage facilities (TSFs) and potential consequences of leakage into groundwater, as well as the selection of the seepage collection system versus liner.

ADEQ Response: ADEQ has determined that the proposed seepage collection system is appropriate for this mine. The seepage collection system, as compared to liners, offers better long-term groundwater protection due to its robust and flexible performance over time. Unlike liners, which are less adaptable, a seepage collection system allows for modifications to their performance in the event monitoring results indicate changes are needed. Additional seepage collection trenches or pump-back wells can be installed as needed to address system performance. Leakage through liners under a tailings storage facility (TSF) can be difficult to mitigate and repair.

2. Commenters expressed concern over a perceived lack of convincing evidence of "good isolation" of tailings from protected aquifers.

ADEQ Response: The concept of “good isolation” is mentioned in Section 3.5.4.3.2 of the BADCT manual, and is only applicable to precious metal tailing impoundments. Conversely, Section 3.5.4.3.1 pertains to Base Metal Tailing Impoundments such as copper mines like Copper World, Inc. and does not contemplate “good isolation”. Instead, the required seepage collection system will capture the TSF seepage and provide BADCT for protecting the groundwater from potential contamination.

3. Commenters raised concerns that BADCT is outdated and tailings storage facilities (TSFs) should be appropriately lined as is typical in other states like Nevada.

ADEQ Response: ADEQ disagrees that the BADCT required in the Copper World APP permit is outdated. Seepage collection systems are a modern technology to ensure groundwater is protected. Many of the mineral resources in Nevada are precious metals, such as gold. Nevada mandates the use of lined tailings storage facilities (TSFs) for gold mines due to cyanide being present in the disposal of pollutants. ADEQ’s Prescriptive BADCT criteria for TSFs at precious

metal mines such as gold mines includes liner requirements similar to Nevada. However, these considerations are inapplicable to copper mines. For example, the Robinson Mine near Ely, Nevada, is not required to have liners for their tailings.

4. Commenters expressed concern that the Dam Breach Analysis assumes only 1% of the tailings would be released in a dam failure. Commenters suggested that the amount of tailings assumed to be released should be between 25% and 90% for a catastrophic dam failure and that a worst-case failure model must be considered to provide emergency planners with the information needed to protect against loss of human life, and to avoid building critical public infrastructure in areas that could be inundated by an unplanned release of tailings.

ADEQ Response: The fundamental basis of the Dam Breach Analysis relies on a published paper by Fontaine, D., & Martin, V. (2015) titled "Tailings Mobilization Estimates for Dam Breach Studies" (https://open.library.ubc.ca/media/stream/pdf/59368/1.0320849/5). This paper presents a methodology for estimating the volume of tailings mobilized by the free water stored in the pond and the resulting initial flood wave following a dam breach.

As mentioned in the Fontaine and Martin paper, the volume of released tailings depends on the supernatant volume used for the analysis. The paper states, "the result is an estimate of the total outflow volume which consists of the initial supernatant pond volume, tailings solids, and interstitial water that would be potentially mobilized."

Using this methodology, the volume of water ponded on the tailings is estimated to be about 1% of the total volume of the cell required to mobilize tailings during a breach event. Approximately 10% of the total tailings volume is calculated to be mobilized over a breach event duration assumed to be one hour.

The Dam Breach Analysis will be periodically updated throughout the life of the facility and will serve as a guideline for emergency preparation and response. ADEQ has included compliance schedule items (CSIs) 4, 8, 22 and 25 in the permit to ensure the dam breach and emergency response plans are updated throughout the facility's operational lifespan.

5. Commenters are concerned about the Dam Breach Analysis memorandum maps of incremental impacts at each TSF cell contain the note stating: “The information shown is approximate and should be used for emergency preparation and response”. Commenters suggested it should read “should not be used for emergency preparation

and response". Please verify whether this information is intended to be used for these purposes.

ADEQ Response: The Dam Breach Analysis is the worst-case scenario and is used for planning both emergency preparation and response strategies. The information shown in the analysis is approximate and should only be used as a guideline for emergency preparation and response.

The Dam Breach Analysis is required to be updated throughout the life of the facility and will serve as a guideline for emergency preparation and response. ADEQ has included compliance schedule items (CSIs).4, 8, 22 and 25 in the permit to ensure the dam breach and emergency response plans are updated throughout the facility's operational lifespan.

6. Commenters expressed concerns about tailing dam safety due to Arizona's extreme temperatures and monsoon conditions and requested that Hudbay conduct extensive system modeling to identify risks.

ADEQ Response: As part of the APP permit application, the Permittee provided the extensive slope stability modeling and assessment for the Tailing Dam, including identifying potential failure modes that could occur during operation of the facilities that would potentially result in an unanticipated release of tailings and/or process solution. These assessments took into account local meteorology, including temperatures and rain patterns.

ADEQ will receive dam safety reports throughout the facility's lifespan, from operations through the post-closure period. These reports will include findings and recommended actions from both the Independent Technical Review Board (ITRB) and the Tailings Review Board (TRB).

7. Commenters noted that Table 13, pages 45-47 lists Pore Pressure Alert Levels (feet of head) with Alert Levels set for Level 1 and Level 2. The proposed numbers are approximate (and somewhat unclear in terms of defining the monitoring point elevation as feet below the phreatic surface) in advance of constructing the TSF and installing the actual piezometers. Commenters requested that ADEQ consider adding a note at the bottom of the table that the numeric alert levels will be modified to reflect the actual elevation above mean sea level limit for each piezometer instead of feet of head in a future amendment once the TSF has been constructed and piezometers have been installed. The monitoring elevations above mean sea level values will result in a more traceable compliance limit that reflects actual elevation of the TSF lifts and piezometer monitoring point elevations.

ADEQ Response: ADEQ concurs with the comment and Table 13 in the APP permit has been updated with a note –

> "Pore pressure alert levels (AL) will be modified to reflect the actual elevation limit (above mean sea level) for each piezometer as they are installed. Updates to these ALs will be incorporated into the annual TSF reporting required under compliance schedule item (CSI) No. 22."

8. Commenters expressed concerns that the permit does not require current state of the art methods to stabilize the tailings and spent leach piles such as open-pit unclassified cemented paste backfilling.

ADEQ Response: While the mining industry and technologies advance, ADEQ welcomes state-of-the-art methods that applicants may choose to utilize in their design, construction and operation including approaches that provide additional approaches to managing tailings facilities, and spent leach piles. The APP, as designed, does not require an applicant to take a singular approach in the backfilling process of tailings or spent leach. Instead, it requires that the applicant demonstrate that the design, construction, operation, closure and post closure process adequately addresses being protective of groundwater quality. In the 2022 application, the Permittee has proposed to backfill the pits as mining progresses with waste rock which ADEQ has determined meets all regulatory requirements of the APP.

9. Commenters expressed concern that Hudbay Minerals did not complete an economic and practical evaluation of tailings-storage facilities alternatives, including a lined and dry-stacked facility, among other potential redesigns.

ADEQ Response: By law, the APP solely regulates discharges of pollutants to groundwater to protect water quality. ADEQ cannot base licensing (permitting) decisions on the economics of the tailings storage facility (TSF) alternatives. However, it is important to note that the application, including the calculation of facility discharge and the Best Available Demonstrated Control Technology (BADCT), considers alternatives proposed by the Permittee for the TSF.

10. ADEQ received several comments regarding the impact of Arizona's extreme temperatures and monsoon events on the TSF and the need to evaluate the effectiveness of the seepage collection system in protecting groundwater.

ADEQ Response: State law requires that the design and operation of a tailings storage facility (TSF) not cause or contribute to a violation of aquifer water quality standards (AWQS) or further degrade the aquifer at applicable point of compliance (POC) monitoring locations. The Permittee's design of the TSFs incorporates the natural geologic formation underneath the TSF in conjunction with a seepage collection system that is designed to capture up to 98% of the anticipated seepage.

The seepage collection system includes strategically placed underdrains throughout the footprint of the TSFs along with seepage collection trenches located along the downgradient perimeter of the facilities. These seepage collection trenches are placed along defined flow paths based on contour mapping of the bedrock and/or low-permeability layers. Seepage will be captured in the underdrains and routed to the seepage collection trenches. These seepage collection trenches are lined on the downgradient side to prevent migration of seepage water. Seepage water is pumped back to the plant via the primary settling pond (PSP) for reuse in the process. Seepage water that bypasses the underdrains will reach the low-permeability layer and migrate toward the seepage collection trenches for capture and removal.

ADEQ required the Permittee to provide technical details as part of the application to ensure that the seepage system has the capacity to handle Arizona's extreme weather conditions under both wet and dry conditions.

11. Commenters expressed concerns about construction of the TSF seepage collection system using the lowest bidder for "gravel" and concerns regarding the quality and effectiveness of the materials used in the collection system.

ADEQ Response: As part of the APP permit application, the Permittee documented the material specification for drain rock to be used in the seepage collection system. The permit requires the facility to be constructed according to the design specifications in the application. In addition to the requirement that the construction materials meet the required specification, earthwork construction quality control and sign-off by the Engineer of the Record are required to ensure the materials meet specifications as required in permit compliance schedule items (CSI) 1 through CSI 3.

3.28. Traffic

1. ADEQ received several comments regarding the potential traffic impacts from the mine such as approval of Hudbay and South32 projects without a finalized traffic plan and without conducting a time-based economic analysis, monitor and control off-site noise, and transportation/road management through Corona de Tucson.

ADEQ Response: ADEQ does not have authority under the APP to evaluate or regulate materials transport, traffic concerns, noise, and road management. Comments related to transportation safety and emergency preparedness may be addressed by the Arizona Department of Transportation (ADOT) or other local justification. Noise is regulated at the local level by Pima County (Chapter 9.30.040) or the town of Sahuarita (Chapter 8.30 Noise).

3.29. Visual Impacts

1. ADEQ received several comments regarding the potential visual impacts of the mine, including concerns about preserving public land, the visible impact on the landscape, the scale of the proposed mine (such as the pit size and waste rock dumping), overall land use, and the loss of scenic views of the suburban Santa Rita Mountains.

ADEQ Response: The APP, as designed by state law, solely regulates discharges of pollutants to groundwater to protect water quality, and does not have the legal authority to evaluate or regulate visual impacts of the mine.

3.30. Waste Rock, Pits, Acid Drainage

1. Commenters expressed concerns that mining operations pose a serious risk of sulfuric acid contamination due to sulfates in the rock, exacerbated by severe monsoon conditions and the disturbance from rock transportation, potentially contaminating local water sources for centuries.

ADEQ Response: As mentioned in Section 3.7, there are no established aquifer water quality standards (AWQS) for sulfates, and pursuant to A.R.S Section 49-223(G), ADEQ does not have authority to include standards for sulfates.

To mitigate the risk of acid drainage, the Permittee will place material classified as non-acid-generating (NAG) on the outer slopes of the backfilled pits, and material classified as potentially acid-generating acid-generating (PAG/AG) will be placed on the interior, with AG

materials encapsulated with NAG material. The pits that receive waste rock backfill are subject to both daily and quarterly inspections of pit slopes in active areas and maintenance of sump levels in accordance with operational criteria, and are monitored quarterly with downgradient point of compliance (POC) groundwater monitoring wells.

ADEQ has the authority to require additional monitoring, testing, and corrective action if the mobilization of AG or PAG materials result in degradation of the aquifer. The POC wells will monitor the BADCT performance of the encapsulation strategy in meeting the AWQS at the POC.

2. Commenters inquired regarding the possible presence of *Thiobacillus ferrooxidans* that could accelerate the oxidation and acidification processes.

ADEQ Response: The permit requires the Permittee to encapsulate potentially acid generating materials (PAG) with non-acid generating materials (NAG). Any potential changes in oxidation state or reaction rates due to Thiobacillus ferrooxidans bioleaching that may catalyze formation of acid are adequately addressed by the encapsulation. The POC well monitoring network will monitor the performance of the encapsulation strategy in meeting the AWQS at the POC regardless of potential reaction rates.

3. Commenters expressed concerns regarding the proposed pit backfill plan. Concerns were expressed that Copper World will not be able to effectively segregate potentially acid-generating waste rock to prevent acid drainage into a pit lake. In addition, concerns were expressed about leaching from the rock occuring for hundreds or thousands of years. This long term leaching caused commenters to suggest that leach tests for pits on the west side of the site should continue beyond the initial nine weeks.

ADEQ Response: The potential for acid generation or neutralization within the mine depends on several factors:

- The chemistry of the rock (acid generation or neutralization potential and buffering capacity)
- The absence (dry) or quantity of water moving through it
- The presence or absence and persistence of exposure to oxygen

Groundwater outflow from pit backfill to surrounding bedrock is predicted to occur at a very low rate, below 10 gallons per minute (gpm). The acid-generating (AG) and potentially acid-generating (PAG) materials will be encapsulated by the non-acid-generating (NAG) material to minimize exposure to oxygen. Pore water chemistry is expected to be circum-neutral and meet AWQS, owing to the NAG composition of backfill and wall rock. Concentrations are expected to decrease over time as outflow flushes and removes mass from backfill material.

The Individual APP permit requires a 30-year post-closure monitoring period and adds limitations on mining within the aquifer zone. Although a 30-year post-closure monitoring period is proposed, the Permittee has agreed to evaluate and extend post-closure monitoring to provide assurances that the operational life of the facility does not result in the degradation of the aquifers. Monitoring over the life of the mine and after closure will assess potential impacts from a geotechnical, structural, and chemical perspective.

The nine weeks mentioned on the APP permit application was for testing samples during the laboratory assessment. The Permittee will provide ADEQ with annual reports throughout the life of the mine, as specified in compliance schedule items (CSI) 5 and 23. Any changes to the Waste Rock Handling Plan's testing frequency will require ADEQ approval.

4. Commenters voiced their concerns regarding the severe monsoon season in Arizona affecting waste rock and increasing acid drainage. Commenters indicated that this requires stormwater management to prevent potentially acid-generating rock from producing acidic runoff.

ADEQ Response: The APP solely regulates discharges of pollutants to groundwater to protect groundwater quality. ADEQ does not have the legal authority under the APP to base permitting decisions on surface water management and monitoring. Regarding the waste rock run off, several waste rock sediment basins have been provided to handle the surface run off from the waste rock facilities. Please see Attachment 15 “Drawing N 104-2-001_Stormwater Management Overall Site Plan_Item 32” of the application. ADEQ required annual reporting through the life of the mine for the placement of waste rock inside the pit and before changing the testing amount listed in the Waste Rock Handling Plan through compliance schedule items (CSI) 5 and 23.

5. Commenters inquired for additional geochemical testing during permitting, construction, or operations, and urged ADEQ to establish a defined minimum frequency of waste-rock acid content analysis for ongoing operations beyond the initial year.

ADEQ Response: The commenter is directed to Attachment 5 of Copper World, Inc.'s April 21, 2023 submission. As stated in the report, geologic mapping of the drill site (blast zone) will be performed by a geologist during this process to identify major rock units, faults, etc., prior to blasting and compared to the data base/mine model. In accordance with Section 2.7.4.5 of the Aquifer Protection Program(APP) permit and compliance schedule item (CSI) 23, an annual Waste Rock Characterization Report must be submitted to ADEQ throughout operation. The report will provide a comprehensive summary and analysis of waste rock characterization conducted during the year. The frequency of waste rock testing will align with the Waste Rock Handling Plan outlined in Attachment 5 of the Permittee's April 21, 2023 submission, and updated version of the plan initially provided in Appendix G.3 of the September 2022 APP permit application. The permit requires annual reporting through the life of the mine for the placement of waste rock inside the pit, and requires ADEQ approval of any changes to the testing frequency listed in the Waste Rock Handling Plan.

6. Commenters expressed concern over the perception that little work has been done to understand the leaching and acid-generation potential for the pits on the west side of the proposed site (these include all pits except the East/Rosemont Pit). Commenters ask if the long-term leach tests for these pits will continue, or will the testing stop after the 9 weeks of results shown in Appendix G.1 of the application? Are there any requirements for Hudbay to do more geochemical testing during permitting, construction or operations?

ADEQ Response: ADEQ's review of the 2022 Copper World Project APP permit application including an extensive review of the leaching processes, and the locations that may have acid generating potential. This review resulted in additional permit requirements that benefit ongoing characterization of the site with respect to the potential impacts of leaching and acid generating processes. In summary and in greater detail below, these requirements are in place to ensure that through the design, construction, operation and closure of the facility, impacts of these processes will be minimized.

In accordance with Section 2.7.4.5 of the APP permit and CSI 23, an annual Waste Rock Characterization Report must be submitted to ADEQ throughout operational periods. The report

will provide a comprehensive summary and analysis of waste rock characterization conducted during the year. The frequency of waste rock testing will align with the Waste Rock Handling Plan outlined in Attachment 5 of the Permittee's April 21, 2023 submittal, an updated version of the plan initially provided in Appendix G.3 of the September 2022 APP application.

The objective of the plan is to classify waste rock into three categories: NAG (non-acid generating rock), PAG (potentially acid-generating rock), and AG (acid generating rock). Approximately 95% of the waste rock associated with the Mine falls under the NAG category. Depending on its classification, waste rock placement within the Waste Rock Facility varies, with NAG waste rock typically positioned on the facility's outer surfaces.

The main testing components are utilized for waste rock classification. This component involves elemental analysis (calcium, magnesium, and sulfur) of a waste rock sample, correlating these results with conventional acid-base accounting analysis to determine whether the rock is NAG, PAG, or AG. Previous testing has established a correlation between elemental analysis and acid-base accounting analysis results. Elemental analysis is conducted on composite samples from production boreholes used for pit rock blasting, aiding in material categorization as ore or waste rock, and further specifying waste rock as NAG, PAG, or AG within the block model or database. This data guides waste rock placement in the Waste Rock Facility.

The APP permit requires the Permittee to provide ADEQ with Waste Rock Characterization Reporting as described in section 2.7.4.5. of the APP permit and CSI 23 with a minimum testing frequency of monthly or every 1,000,000 tons of waste rock mined. Additional tests, such as humidity cell tests, Meteoric Water Mobility Tests (MWMP), or Synthetic Precipitation Leaching Procedure (SPLP) tests, are planned to confirm parameters used in geochemical modeling for the CWP.

According to CSI 5, any changes to the testing frequency specified in the Waste Rock Handling Plan require approval from ADEQ.

3.31. Wildlife / Biodiversity

1. ADEQ received several comments regarding the potential wildlife and biodiversity impacts from the mine such as environmental impacts of mining in the Santa Rita Mountains, destruction of riparian habitats, ecosystems, and wildlife, including

threatened and endangered species, lack of consideration for water usage and habitat destruction, conflicts with the Sonoran Desert Conservation Plan, and emphasizing the need for stronger regulations to protect the region's natural and cultural resources.

ADEQ Response: The APP, as designed by state law, solely regulates discharges of pollutants to groundwater to protect water quality, and does not have the legal authority to require the Permittee to include measures to prevent impacts to wildlife. Furthermore, under A.R.S. Section 41-1030(B), ADEQ cannot base licensing (permitting) decisions on requirements or conditions that are not specifically authorized by rule or statute.

While the APP permit is limited on specific regulations relative to wildlife, riparian systems, endangered species etc, it does provide protections to groundwater quality through the program's authorities that indirectly address concerns regarding wildlife and biodiversity.

4. APPENDIX: LIST OF ACRONYMS

List of Acronyms	
A.A.C.	Arizona Administrative Code
ACC	Arizona Corporation Commission
ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
AG	Acid Generating
AL	Alert Level
APP	Aquifer Protection Program
AQL	Aquifer Quality Limit
A.R.S.	Arizona Revised Statutes
AWQS	Aquifer Water Quality Standards
AZ	Arizona
BADCT	Best Available Demonstrated Control Technology
bgs	Below ground surface
bls	Below land surface
CSI	Compliance Schedule Item
CSM	Conceptual Site Model
CWA	Clean Water Act
CWI	Copper World, Inc.
DIA	Discharge Impact Area
DL	Discharge Limit
EIS	Environmental Impact Statement

EPA	Environmental Protection Agency
FAM	Financial Assurance Mechanism
ft	Feet
GISTM	Global Industry Standard on Tailings Management
gpd	Gallons per day
gpm	Gallons per minute
LTF	Licensing Time Frame
MAC	Mining Association of Canada
MCL	Maximum Contaminant Level
mg/L	Milligrams per liter
NEPA	National Environmental Policy Act
NAG	Non-Acid Generating
ORP	Oxidation Reduction Potential
pCi/L	Picocuries per liter
PAG	Potentially Acid Generating
PE	Professional Engineer
PLS	Pregnant Leach Solution
PMA	Pollutant Management Area
POC	Point of Compliance
POO	Plan of Operations
RG	Registered Geologist
ROD	Record of Decision

SX-EW	Solvent extraction and electrowinning
TSM	Towards Sustainable Mining
TSF	Tailing Storage Facility
TSS	Total Suspended Solids
ug/L	Micrograms per Liter
USFS	United States Forest Service
USGS	United States Geological Survey
WQD	Water Quality Division

5. APPENDIX: LIST OF COMMENTERS

Commenter names, sorted alphabetically by last name, are listed once, regardless of the amount or type of responses one individual submitted.

	Last Name	First Name
1	A	Andrew
2	Abbott	Jeffrey
3	Abbott	Lucinda
4	Abel	Martha
5	Abernathy	Ila
6	Acevedo	Gilbert
7	Achezinski	Dennis
8	Ackerman	Andrea
9	Ackerman	Joe
10	Ackerman	Marisol
11	Acosta	Joe
12	Adams	Ben
13	Adams	Gail
14	Adams	Keith
15	Adams	Mary
16	Adams	Sara
17	Adams	Terry
18	Adams	Wendy
19	Adamson	Bill
20	Adamson	Marylee
21	Adcox	Dan
22	Adcox	Danny
23	Aden	Sandi
24	Adkins	Patti
25	Aglione	Constance
26	Ahlschwede	Willa
27	Aiken	Susan
28	ALAMILLO	RALPH

	Last Name	First Name
29	Albert	Andrea
30	Albert	Sandra
31	Albert	Sandy
32	Albertson	Kathy
33	Albrecht	Holly
34	Albright	John
35	Alcaraz	Robert
36	Alderman	Susan
37	Aldern	Kathy
38	Aldrich	Charles
39	Aldrich	Thomad
40	Alexander	Kristi
41	Ali	Lydian
42	Allaire	Peggy
43	Allan	Arthur
44	Allen	George
45	Allen	Kenneth
46	Allen	Linda
47	Allen	Neale
48	Allison	Karen
49	Allred	Jimmy
50	Almasy	Lucy
51	Alphin	Timothy
52	Alvesteffer	Pamela
53	Alvine	Lynn
54	Amato	John
55	Amoroso	Amy
56	Amy Eisenberg	Dr.
57	and Janis Labiner	David

	Last Name	First Name
58	and Robbie Wertin	John
59	And Valerie Welborn	Michael
60	Andazola	Vicki
61	Andersen	Kathy
62	Andersen	Lori
63	Andersen	Sharon
64	Anderson	Charles
65	Anderson	Cheryl
66	Anderson	Craig
67	Anderson	Ed
68	Anderson	Eric
69	Anderson	Fred
70	Anderson	Gena
71	Anderson	Joe
72	Anderson	Laurel
73	anderson	owen
74	Anderson	Richard
75	Anderson	Robert
76	Anderson	Rory
77	Anderson	Suzanne
78	Andreassen	Norman
79	Andresen	Anna-Leigh
80	Andrews	Jessica
81	Andrews	Nancy
82	Andrews	Thomas
83	Andrews	Tinsley
84	Anhock	Jason
85	Anifer	Andrew
86	Ann Burd	Lori
87	Ante	Lois
88	Antieau	Kim
89	Antonelli	Amber
90	Appel	Lindsay
91	Applegarth	Ginger
92	Araiza	Adalberto

	Last Name	First Name
93	Araiza	Adalberto M.
94	Araiza	Patricia
95	Arbonies	Denise
96	Armstrong	Roosevelt
97	Arrey	Albert
98	Arrigoni	Mary
99	Arundel	Christopher
100	Asel	Cary
101	Ash	Edwin
102	ash	sharon
103	Ashby	Jason
104	Ashby	Sandra
105	Ashin	Rebecca
106	Ashrafpour	Esmaeel
107	Atha	Daniel
108	Atherton	Nancy
109	Athey	Roger
110	Atkins	Carol
111	atkins	Nate
112	Atkinson	Melissa
113	Atwood	Kristie
114	Ault	Jennifer
115	Austin	Christine
116	Austin	James
117	Austin	Jana
118	Austin	Peter
119	Austin V	James
120	Austring	Dee
121	Ausubel	Seth
122	Avechuco	Henry
123	Avila	Ashley
124	Ayers	Bob
125	Ayyar	Adarsh
126	Azevedo	Bill
127	B Girshick	Lori

	Last Name	First Name
128	B Harrington	W
129	Babcock	Kathryn
130	Baber	Bonnie
131	Babson	David
132	Baca	John
133	Baca	Kenneth
134	BACA	ROBERT
135	Bagby	Brian
136	Bahler	Mitch
137	Bahlman	Dinah
138	baig	laurent
139	Bail	Joseph
140	Bail	Siobhan
141	Bail	Zachariah
142	Bailey	James
143	Bailey	Vicki
144	Baker	Annie
145	Baker	Beryl
146	Baker	Buddy
147	Baker	Cheryl
148	Baker	David
149	Baker	Mike
150	Baker	Richard
151	Baker	Shane
152	BAKKEN	ANIKA
153	Balasubramaniyan	Ambika
154	Baldock	Teres
155	Baldwin	Anne
156	baldwin	Annette
157	baldwin	Howard
158	BALDWIN	LELAND
159	Balentine	Farrell
160	Bales	Clarice
161	Ball	Keith
162	Ball	Lynn

	Last Name	First Name
163	Bamberger	Elizabeth
164	Bamberger	Gary
165	Banks	Alan Banks
166	Banks	George
167	barber	brian
168	Barber	Hazel M
169	Barber	Lucette
170	Barber	Michael
171	Bargy	Terry
172	Barinka	Shawn
173	Barker	Richard
174	Barker	Scott
175	Barker	Stephanie
176	Barland	Michael
177	Barnett	Aaron
178	Barnette	Renee
179	Barney	Barbara
180	Barone	Kevin
181	Barone	Sharon
182	Barreto	David
183	Barry	Stephanie
184	Bartels	Dick
185	Barter	Taylar
186	Barto	Dean
187	Barton	Corey
188	Barton	Teresa
189	Bash	Randall
190	Basta	Joanne
191	Bates	Lisa
192	Batway	Jewell
193	Bauer	Carol
194	Baumann	Steve
195	Baumgartner	Ron
196	Baumhefner	Allison
197	Bautista	Melvin

	Last Name	First Name
198	Baxter	Barbara
199	Baxter	Lynn
200	BAYLESS	JOHN
201	Bayless	Linda
202	Bayless	Linda E
203	Baynard	Anthony
204	Baynard	Susan
205	Beal	Deron
206	Beale	Chad
207	Bear	Dinah
208	Bearden	William
209	BEARDSLEY	WENDY
210	Bearer	Laurie
211	Beaubier	Gretchen
212	Beauregard	Nicholas
213	Beck	Lauren
214	Beck-Brown	Susan
215	Beckham	M
216	Beesemyer	Susan
217	Beeson	David
218	Begay	Dan
219	Begay	Jennifer
220	Beggy	Holly
221	Behn	Gerald
222	Behrendt	Susan
223	Behrstock	Robert
224	Beier	Richard
225	Beling	Dave
226	Bell	Deborah
227	Bell	Jan
228	Bell	Matt
229	Bell	Stephanie
230	Bell	Susan
231	Bella	Maria
232	Beloin	Theodore

	Last Name	First Name
233	Beltran	Michelle M
234	Benally	Rena
235	benavides	luiza
236	Bendele	Linda
237	Bengtson	Stan
238	Benjamin	Michael
239	Bennett	Alberto
240	Bennett	Nancy
241	Bennett	Ricky G.
242	Bennett	Roland
243	Bennett	Saba
244	Benoist	Gregory
245	Benschoter	John
246	Benson	Shanna
247	Berdine	Patricia
248	Bergan	Sherri
249	Bergen	Patricia
250	Berger	Tate
251	Berk	Donald
252	Bernard	Judy
253	Bernick	Tabitha
254	Berrones	Nancy
255	Berteram	Mike
256	Bertolozzi	Melody
257	Bertram	Mike Bertram
258	Bertran	Mike
259	Berus	Mark
260	Bess	Robert
261	Bessett	Deborah
262	besson	denis
263	Beth	Kim
264	Beving	Dirk
265	Bickel	Bettina
266	Bidegain	Sherry
267	Biebel	Thomas

	Last Name	First Name
268	Biehn	Judy
269	Bierman	Kenneth
270	Bihler	Chris
271	Billhartz	Kent
272	Bingham	Justin
273	Binnie	Alan
274	Bird	Cindy
275	Birdman	Edward
276	Birkemeier	Sara
277	Birkett	Mary
278	Birlean	Diana
279	Bishop	Chelsey
280	Bisschop	Peter
281	BISSELL	BYRON
282	Blaauw	Jackie
283	Blackburn	Mike
284	Blackman	Jeffrey
285	Blackston	Lyn
286	Blair	A B
287	Blaising	Sally
288	Blake	Susan
289	Blake	Thomas
290	Blakeman	Judy
291	Blanc	Benoit
292	Blanche	Pam
293	Blanz	Laurie
294	Blaski	Mindy
295	Bloch	Aleta
296	Blocher	Karen
297	BLOOMENTHAL	Leah
298	Bloomfield	Miriam
299	Blount	Justin
300	Blume	Edda
301	Blume	Will
302	Bock	Genevieve

	Last Name	First Name
303	Bockstedt	Chester
304	Boden	Laura
305	Bodnaruk	peter
306	Bohlman	William
307	Bolton	Larry
308	Bomgardner	Jackie
309	Bonar	Louis
310	Bond	Michael
311	Bontrager	Marion
312	Boose	Martha
313	Booth	Dale
314	Borbon LL.M.	Maria
315	Borchardt	Paula
316	Borden	Gerald
317	Borey	David
318	Bostwick	Scott
319	Bottino	Charles
320	Boulter	George
321	Bownds	Shannon
322	bowyer	robin
323	Boyd	Irene
324	Boyd	James
325	Boykin	Ken
326	Brack	Roberta
327	Bradford	Charles M
328	Bradford	Debra
329	Bradley	Lynne
330	Brady	Jeanne
331	Braithwaite	Georgia
332	Braly	Kat
333	Bramhall	Rick
334	Brammer	Scott
335	Brandes	Susan
336	Brannon	Elizabeth
337	Brasswel	Kerry

	Last Name	First Name
338	brauer	janell
339	Breaux	Nell
340	Breen	John
341	Breining	Jim
342	Breitenbach	Ronald
343	Brems	Sarah
344	Breneman	Scott
345	Bridges	London
346	Briggs	David
347	Briggs	Shara
348	Briggs	Sharon
349	Brighton	Susan
350	Brill	Scott
351	Brintnall	Mike
352	Broby	Michelle
353	Brokaw	Dale
354	Brooke	Michael
355	Brooker	Jim
356	Broome	William
357	Brost	Doug
358	Brower	Richard
359	Brown	Christie
360	Brown	Dave
361	Brown	Debra
362	Brown	Derek
363	Brown	Kyle
364	Brown	Lindie
365	Brown	Lisa
366	Brown	Michael
367	Brown	Mike
368	Brown	Rich
369	Brown	Shelly
370	Brown	Stephen
371	Brown	Steve
372	Brown	Thomas

	Last Name	First Name
373	brown	william
374	Brown	Wynne
375	Brownell	Duane
376	Browning	Marjorie
377	Browning	Pat
378	Bruce	Ellen
379	brun	michael
380	Brundage	Alan
381	Brunet-Stephens	Deborah
382	Brungardt	Jerry
383	Bryant	Lori
384	Bryant	Melissa
385	Buck	Barbara
386	Buechele	Margaret
387	Buell	Joshua
388	Buell	Julie
389	BUGBEE	CHRIS
390	Buhlman	Lori
391	Bullock	Donna
392	Bunting	Alison
393	Burba	Ann
394	Burczynski	Jason
395	Burd	Lori
396	Burd	Lori Ann
397	Burdette	Douglas
398	Burdick	Will
399	Burgan	Marti
400	Burgess	Kathryn
401	Burgess	Martha
402	Burke	Arthur
403	Burke	Donna
404	Burke	Suzanne
405	Burkholder	Robert
406	Burkstrand	James
407	Burnside	Richard

	Last Name	First Name
408	Burr	Brandon
409	Burrell	Alene
410	Burrier	Charles
411	Burris	Burley
412	Burton	Lura
413	Burton	Robert
414	Butierez	Daniel
415	Butler	Ava
416	Butler	David
417	Butler	Randy
418	Butler	Walter
419	Buttke	John
420	Byers	Donna
421	Byrd	Virginia
422	Cage	Ray
423	Cahill	Cheryl
424	Cahill	Winifred
425	Cajigas	Armando
426	Calaway	Mary
427	Caldwell	Deborah
428	Caldwell	Dennis
429	Calhoun	Susan
430	Callaway	Jennifer
431	Callaway	Theresa
432	Calvo	Melvin
433	Campbell	Addisen
434	Campbell	Carolyn
435	Campbell	Deborah
436	Campbell	June
437	Campbell-Carter	Melanie
438	Campos	Alvaro
439	Canestre	Susan
440	Canning	Jan
441	Cantile	Diane
442	Cantillo	Laurie

	Last Name	First Name
443	Cantu	Paco
444	Caputo	Philiip
445	Caputo	Philip
446	Car	Martina
447	Cardenas	Emily
448	Cardenas	Isaac
449	Cardero	Silvio
450	Cardwell	Michael
451	Carello	Andrea
452	Carello	Sue
453	Carey	Alex
454	Carey	Deb
455	Carley	William
456	Carlile	NJ
457	Carlson	Beth
458	Carlson	Elan
459	Carmichael	Thomas
460	Carney	Marilyn
461	Caron	Stacey
462	Carpenter	Barbara
463	Carrasco	Conrad
464	Carrasco	David
465	Carrasco	Remy
466	Carrasco	Rick
467	Carroll	Angelina
468	Carter	James
469	Carter	Michaela
470	Carver	Robert
471	Casale	Joan
472	Casale	Joan L
473	Casale	Mary
474	Cascia	Joseph
475	Case	Dennis
476	Casey	Sean
477	Casey	Thomas

	Last Name	First Name
478	casey	verne
479	Casillas	Diego
480	CASLIN	Betty MC
481	Cass	Rick
482	Casselman	Elizabeth
483	Castiano	Judith
484	Castle	Joan
485	Castro	Marlene D
486	Catt	Janice
487	Causey	Frances
488	Cavale	Tamara
489	Cave	Bud
490	Cederholm	Mark
491	Celeste	Adeline
492	Centers	Mike
493	cerre	eric
494	Chaboya	Seneca
495	Chacon	Jacqueline
496	Chaffin	Carrie
497	Chambers	Bill
498	Chambers	David
499	Chambers	Laurie
500	Chang	Seongok
501	Chang	Tiff
502	Chaplin	Clarence
503	Chapman	Jerry
504	Chapman	Robert
505	Chase	Bill
506	Chavez	Mandy
507	Chavez	Salissa
508	Chavez	Santiago
509	Chen	Patricia
510	Cherry	Corienne
511	Chesner	Donna
512	Chidester	Nancy

	Last Name	First Name
513	Childs	Nat
514	Chilson	D
515	Chimene	Jeffrey
516	Chin-Lai	Amy
517	Chipman	Tara
518	Chisholm	Donald
519	Chmel	Kim
520	Choate	Jan
521	Choe	Stella
522	Choi	Jon
523	Cholewa	Mitchell
524	Chontos	Diane
525	Choppers-Wife	Sue
526	Chorlton	David
527	Chouinard	dave
528	Christensen	Jay
529	Christensen	Kathleen
530	Christensen	Shirley
531	Christian	Candice
532	Christiansen	Scott
533	Christie	Bill
534	Christy	Steve
535	Chwalek	Kathryn
536	ciaramitaro	joseph
537	Cirrincione	Laurie
538	Clark	Jane
539	Clark	Mike
540	Clark	Sanda
541	Clarke	Jennifer
542	Clarke	Michael
543	Clauges	Rick
544	Clavin	Tom
545	Claxyton	Randy
546	Clay	Gary
547	Clay	Timothy

	Last Name	First Name
548	Clepper	Barbara
549	Cleveland	Roger
550	Cline	Catherine
551	Cline	Jennifer
552	Cline	Joseph
553	Cline	Lynn
554	Cliver	Keith
555	Cliver	S K
556	Cliver	Stanley
557	Clonts	Kyle
558	Closs	Virginia
559	Cloud	Christine
560	Coblentz	David
561	Cocchiola	Maria
562	Cochran	Casey
563	Cockrill	Lucia
564	Cody	T.
565	Cody	T. Stephen
566	Coghlan	Patricia
567	Cohen	Edward
568	Cohn	Janet
569	Coker	Allison
570	Coker	Rick
571	Coker	Sara
572	Colangelo	Kim
573	Colby	Keith
574	Cole	Kim
575	Cole	Steven
576	Cole	Tracy
577	Colebank	Darryl
578	Colgero	Judith
579	Colicchio	Dave
580	Colletti	Kathy
581	Collins	Lee
582	Collins	Michael

	Last Name	First Name
583	Collins	Norman
584	Collis	Di
585	Colo	Terry
586	Colpas	Marcie.
587	Compton	John
588	Conde	Adolfo
589	Conder	Mona
590	Conforti	KF
591	Conlin	Jane
592	Connelley	Lynn
593	Connelly	Michael
594	Conner	Charles
595	Connolly	Lisa
596	Conrad	Maureen
597	Conroy	Karen
598	Constable	Jennifer
599	Constantine	Wendy
600	Contreras	Martin
601	Controne	John
602	Conway	Charles
603	Cook	Anthony
604	Cook	Debra
605	Cook	Jerry
606	Cook	Robert
607	Cook	Tina
608	Coombs	Theresa
609	Cooper	James
610	Cope	James
611	Copeland	Henry
612	Corazzini	MaryAnne
613	Corcoran	Christine
614	Cordova	Eliana
615	Coretz	Mike
616	Cornell	Beth
617	Cornils	Brent

	Last Name	First Name
618	Corona	Jerris
619	Corrales	Dina
620	Corrales	Tony
621	Corrigan	Joanna
622	Corsten	Alexander
623	Cosgrove	Elizabeth
624	Cossio	Claudio
625	Costa	Michael
626	Costa	Mike
627	Coston	Steve
628	Cote	Cale
629	Cothrun	Seth
630	Cotten	Anne
631	Cotter	Justina
632	COUCHMAN	LAURA
633	Courtney	Todd
634	Cowles	Jillian
635	Cowper	Harriet
636	Cox	Jane
637	Cox	Jannie
638	Cox	Joel
639	Cox	Karen
640	Cox	Nanci
641	Coyle	Margaret
642	COZZENS	PATRICK
643	Craft	Rebecca
644	Craig	Roberta
645	Crain	Danny
646	Crain	Stephen
647	Crane	Marcella
648	Crank	Anita
649	Crawford	Jon
650	Crawford	Jonathan
651	Crawford	Lorraine
652	Crawford	Mollie

	Last Name	First Name
653	Creasy	Tony
654	Creek	Matt
655	crenshaw	robert
656	Crenshaw	Stephen
657	Crespo	Judith
658	Crim	Noel
659	CRISBOI	Ted
660	Croghan	Debra
661	Cromer	Susan
662	Cronin	Rick
663	Crook	Wendell
664	Crooks	Elizabeth
665	Crow	Charlotte
666	Crow-Kautz	Stacey
667	Crowley	Richard
668	Cruz	Benjamin
669	Crytzer Fry	Melissa
670	Cucchiara	Caroline
671	Culbertson	Kermit
672	CUMBERBATCH	Colin
673	Cummings	Jason
674	Cummings	Kevin
675	Cummings	Robert
676	Cunningham	Aubrey
677	Cunningham	Cari
678	Curcio	Rob
679	Curia	Peter
680	Currie	Jolene
681	Curry	William
682	Curtis	Christine
683	Curtis	Tim
684	Cuttler	Karen
685	Cvitkovich	Dick
686	Cymbor	Susie
687	Czachor	Marysia

	Last Name	First Name
688	Czuprynski	Zachary
689	D Sciotto	Gregg
690	Dahl	Chris
691	Dahlgren	Vicki
692	Dahmer	Richard
693	Dailey Dailey	Brenda Williamson
694	dalal	ami
695	Dale	Linda
696	Dale	Sharon
697	Dalmolin	W A
698	Dalrymple	Jenine
699	Daly	Dorcas
700	D'Amore	Sandra
701	Dang	Cindy
702	Dangaran	Julia
703	Daniel	L Renee
704	Danielson	Augustus
705	Darian	Anna
706	Darish	Susan
707	Darling	Carrie
708	Darling	Mary
709	Dash	Emilio
710	Dash	Mandy
711	Daskal	Sharon
712	Datcu	Ioana
713	David	Esther
714	Davidson	Debra
715	Davidson	Sally
716	Davies	Robert
717	Davis	Cooper
718	Davis	Danny
719	Davis	Elaine
720	Davis	Judith
721	Davis	Laura
722	Davis	Lois

	Last Name	First Name
723	Davis	Mark
724	Davison	Earl
725	Davis-Velez	Lonnie
726	Dawson	Dr. Janet
727	Dayton	Michael
728	de Jong	Jean
729	DeAngelis	Jackie
730	Dearing	Vanessa
731	Dearman	Sheila
732	DeArmond	Sue
733	Decker	Adam
734	Decker	Tracy
735	Deede	Juanita
736	Deering	Robert
737	DeFeo	Nancy
738	Degroot	Dave
739	DeGroot	David
740	Delaura	Diane
741	Delcoure	James
742	Deleon	Carrie
743	Deleon	Marta
744	Delgado	Fabiola
745	Delgado	Sierra
746	Dell	Patricia
747	DellaPenta	Cathy
748	Dellinger	David
749	Delman	Alan
750	DeLong	Wayne
751	Deltogno-armanasco	John
752	Delvecchio	Cheryl
753	Demas	Nick
754	Demchenko	Vera
755	Demidio	Bradley
756	D'Emidio	Brad
757	Denning	Judith

	Last Name	First Name
758	DeRegis	Maurice
759	deRivera	Carole
760	Deshotel	Shelley
761	Desmond	Dennis
762	Desmond	Katie
763	Desoucey	Arielle
764	DeSpain	Brad
765	DesRosier	David
766	Detlefsen	Gwen
767	Devere	Marcia
768	Devesty	Angela
769	Devesty	Blaine
770	DeVille	Abbey
771	Devine	Casey
772	Devine	Jeanne
773	Dhruv	Eric
774	Diaz	Antonio
775	Diaz	Martha
776	Diaz	Oscar
777	Diaz-Reyes	TaÃna
778	Diaz-Reyes	Taína
779	DiCecca	Carolyn
780	Didur	Nick
781	Diehl	Patrick
782	Dill	Kim
783	Dillon	Debra
784	Dillon	Edie
785	Dillon	Lawrence
786	Dimeco	Joseph
787	DiMino	MICHAEL
788	Dinette	Tom
789	DiNunzio	Mark
790	Dixon	Bruce
791	Dixon	Jon
792	Doelle	Bill

	Last Name	First Name
793	DOGOLI	ELIZABETH
794	Dohaniuk	Beth
795	Doherty	Joanne
796	Doherty	Mary
797	Doherty	Tim
798	Dohrman	Bryce
799	Doidge	Robin
800	Dolan	Robert
801	Doman	Heidi
802	Domingues	Barbara
803	DONALDSON	JOSEPH
804	DonFrancesco	Eileen
805	Donohoe	Carol
806	Donohue	Amy
807	Donohue	Robert
808	Donovan	Stephan
809	Dorn	Kathryn
810	Dorris	John
811	Doubek	Idalia
812	Douglas	Alan
813	Douglas	Dianne
814	Douglass	Amy
815	Dowling	Jan
816	Dowling	Michael
817	Downer	Patricia
818	downey	donna
819	Downing	Renee
820	Doyle	David
821	Drenske	Karoel
822	Drenske	Laynie
823	Dreste	Arlene
824	Drew	Amy
825	Drew	Deborah
826	Drigotas	Nancy
827	Drozd	Kristofer

	Last Name	First Name
828	Drum	Jorge
829	Drumm	Geoff
830	Duarte	Lisa
831	Dubbs	Kathleen
832	Duff	James
833	DUGAN	DANIEL
834	Duisberg	Stephanie
835	Dunagan	Betty
836	Duncan	Bart
837	Duncan	Cynthia
838	Duncan	Dave
839	Duncan	Richard
840	Duncan	Troy
841	Dunham	Robert
842	Dunn	Aurora
843	Dunn	Jerry
844	Dunn	Michael
845	Dunne	James
846	Dupuis	Matthew
847	Duran	Janet
848	Duran	Rebekah
849	Durgain	Michael
850	Duster	George
851	Dustman	Larry
852	Dutra	Dawn
853	Dyer	Dawn
854	Dykers	Lawrence
855	Dymond	Judy
856	E	S
857	E Casale	Mary
858	E Miller	John
859	Eames	Cheryl
860	Earl	Michael
861	Eason	William J
862	East	Larry

	Last Name	First Name
863	Eastburn	Anne
864	Easter	Charles
865	Eastham	Robert
866	Eastlack	Mathew
867	Easton	Rick
868	Eaves	Myrna
869	Eberhardt	Kaitlynn
870	Eccleston	William
871	Eckert	Louise
872	Eckert	Ruth
873	Eckhardt	Dale
874	Eckles	Terri
875	Eckstein	Ron
876	Edgerton	Alison
877	Edwards	Harriet
878	Edwards	Lucille R
879	Edwards	Monique
880	Effertz	Ken
881	Egbert	William
882	Ehnert	Margaret A
883	Eisenberg	Amy
884	Eisenberg	Dr. Amy
885	Eisenstein	LP
886	Ellingsworth	Jim
887	Elliott	Alan
888	Elliott	Nancy
889	Elliott	Thomas
890	Ellis	Mary
891	Ellis	Paulett and Roger
892	Ellis	Rachel
893	Ellison	Margery
894	Ellsworth	Iona
895	Ellsworth	Janelle
896	Elmore	Walter
897	Elphinstone	David

	Last Name	First Name
898	Ely	Gregory
899	Ely	Lezlie
900	Emel	Janet
901	Eminowicz	Vince
902	Emmerson	Jeanne
903	Emmons	Chauvin
904	Encinas	Carlos
905	Engel	Joseph
906	Englander	Carl
907	English	Ann
908	Enright	Elizabeth
909	Enright	Joe
910	Ensign	Deborah
911	Ensign	Diane
912	Ensign	Pamela
913	Epperson	Leslie
914	Epperson	LeslieTh
915	ERICKSON	CALVIN
916	Erickson	Kathleen
917	Ernst	Cathie
918	ERNST	DENISE
919	Erol	Ozlem
920	Escamilla	Clarissa
921	Esguerra	Lon
922	espinoza	lorraine
923	Estacion	Carlene
924	Estarrona	Mikael
925	Estrada	Deidra
926	Euerle	Chase
927	Evans	Betty
928	Evans	Brianne
929	Evans	Michael
930	Everhart	Noelle
931	Ewing	Diana
932	Eylander	Jiames

	Last Name	First Name
933	F. La Falce	Stephen
934	Fachet	Kathi
935	Fachet	Patrick
936	Facio	Gilbert & Joy
937	Fagan	Timothy
938	Fahey	Kathleen
939	Fahringer	Nancy
940	Fairbanks	Belinda
941	Falco	Emilio
942	Falcon	Grecia
943	Falcon	Jenn
944	Fanaika	Sunia
945	FANNING	DONALD
946	Farese	Margaret
947	Farrar	Chadd
948	Fass	Arline
949	Faucher	Margaret
950	Faucher	Peggy
951	Faulkner	James
952	Faust	John
953	Favor	Justin
954	Favor	Kathleen
955	Featherstone	Roger
956	Feehan	Thomas
957	Feldbush	MARTHA
958	Feldmayer	Diane
959	Felipe	Isabel
960	Fellner	Leslie and Dennis
961	Fennell	April
962	Fenner	Gloria
963	Ferguson	Debra
964	Ferguson	Joseph
965	Ferguson	Patricia
966	Ferner	John
967	Ferranti-Neilson	Alexia

	Last Name	First Name
968	Ferrell	Jesse
969	Ferrigan	Kelly
970	Feuerbacher	Nancy
971	Fiastro	Fred
972	Fichter	Christine
973	Field	Lucas
974	Fife	Jay
975	Figueroa	Daniel
976	Filkins	Rensselaer
977	Fimbres Sr	Jose L
978	Finch	Robert
979	Fine	Donna
980	Fine	Jovita
981	Finster	Zackary
982	Finstrom	Holly
983	Firestone	Lynne
984	Fischer	Dennis
985	Fischer	Kenneth
986	Fischer	Pam
987	Fish	Frederick
988	Fisher	Carolyn
989	Fisher	George
990	Fishgold	James
991	Fite	Katie
992	FITERMAN	Marlys
993	Fitzner	Lisa
994	Flaim	Julie
995	Flanders	Meg
996	Flanigan	Shawn
997	Flessa	Karl
998	Fletcher	Elaine
999	Flodin	Erik
1000	Floor	Mark
1001	Flores	George
1002	Flores	Gilbert

	Last Name	First Name
1003	Flowers	Deborah
1004	Flowers	Desiree
1005	Floyd	Roxann
1006	Flynn	Larry
1007	Fogleman	Maxwell
1008	Fondiler	Bradley
1009	Fontecilla	Melissa
1010	Forbes	Gary
1011	Ford	Peggy
1012	Ford	Tara
1013	Formikell	Nancy
1014	FORREST	RICHARD
1015	Forsey	Dayle
1016	Forte	Lori
1017	Fortna	Sarah
1018	Foster	Stephanie
1019	Fotinos	Christine
1020	Fowler	Cassandra
1021	Fox	Deborah
1022	Fox	Fabrianne
1023	Fox	Susan
1024	Franco	Brenda
1025	Frank	Bernice
1026	Frank	Chris
1027	Frank	elizabeth
1028	Frank	Larry
1029	Franklin	Karen
1030	Frantzve	Kent
1031	Franz	Carolyn
1032	Fraser	Caroline
1033	Frasier	Marjorie
1034	Fray	Linley
1035	Fray	Martha
1036	Frazee	Shane
1037	Frazier	Carol

	Last Name	First Name
1038	Frazier	Joani
1039	Frazier	Shirley
1040	Fread	Peggy
1041	FREDERICK	HOWARD
1042	Frederick	P
1043	Frederiksen	Chris
1044	Freeman	Gregory
1045	Freeman	Joshua
1046	Freer-Parsons	Christiane
1047	Freese	Erica
1048	freestone	scott
1049	Freisinger	Shellie
1050	Freitas	Jesse
1051	French St. George	Marilyn
1052	Freyensee	Matt
1053	Friel	Mike
1054	Fries	Eric
1055	Friesen	Anna-Marie
1056	Friesen	Debbie
1057	Frighetti	Paula
1058	Frisella	Michele
1059	Fritsch	Judith
1060	Frizzell	Stephanie
1061	Frost	Chris
1062	Fry	James
1063	Fry	Melissa
1064	Fuhst	Paula
1065	Fularczyk	Margaret
1066	Fulgham	Kirsten
1067	Fuller	Arthur
1068	FULLER	HAROLD
1069	Furgason	Anne
1070	Furrie	John
1071	Futonella	DJ
1072	Fyffe	Nicole

	Last Name	First Name
1073	Gaanderse	Ramon
1074	Gaio	Cynthia
1075	Galindo	Albert
1076	Gallagher	Barbara
1077	GALLAGHER	BARBARA J
1078	Gallagher	Gordon
1079	Gallardo	Joseph
1080	Gallardo	Lias
1081	Gallego	Victor
1082	Gallo	Kristy
1083	Galmarini	Anthony
1084	Gamrath	David
1085	Ganz	Rebecca
1086	Garay	Sidney
1087	Garcia	Cheyene
1088	Garcia	Joe
1089	Garcia	Lana
1090	Garcia	Leticia
1091	Garcia	Linda Harper
1092	Garcia	Lionelyn
1093	Garcia	Orlando
1094	Gardner	Coleman
1095	Gardner	Jerry
1096	Garfin	Gregg
1097	Gargasz	Norma Jean
1098	GARMAN	Robin
1099	Garner	Jeff
1100	Garoutte	Claudia
1101	Garrett	Jim
1102	Garvey	Lydia
1103	Gascho	Ute
1104	gaumer	Frank
1105	Gaun	Tarlton
1106	Gavrilovic	Mick
1107	Gawal	Jeffry

	Last Name	First Name
1108	Gay	Scott
1109	Gaynor	Barbara
1110	Gazica	Michele
1111	Gebler	Joseph
1112	Gegeanis	Luanne
1113	Geiler	Gary
1114	Genco	Jennifer
1115	Gennaro	Gina
1116	Gentling	Gail
1117	George	Chester
1118	George	James
1119	George	Rodney
1120	Gerard	Maureen
1121	Gerardi	Sam
1122	Gerbig	David
1123	Gerhardstein	Elaine
1124	Gerhart	Barbara
1125	Gerkin	David
1126	Gervais	Charles
1127	Geyer	John
1128	Giannini	Bryan
1129	Gianotti	Sandra
1130	Gibbs	Deborah
1131	Gibbs	Denise
1132	Gibbs	Steve
1133	Gibson	Jane
1134	Gibson	Sara
1135	Gibson	Sina
1136	Gibson	William W
1137	Gilbert	Gay
1138	GILBERT	JOHN
1139	Gilbert	Marilyn
1140	Gilchrist	William
1141	Giles	Tami
1142	Gill	Jerry H.

	Last Name	First Name
1143	Gillespie	David
1144	Gillette	George
1145	Gillotti	Jeri
1146	Gilroy	James
1147	Gilson	James
1148	Giltz	Alina
1149	Giltz	Lainie
1150	Gingerich	Mary
1151	GINGERICH	TEDDY
1152	Ginther	Melanie
1153	Gioia	Tony
1154	Giron	Alex
1155	Girshick	Lori
1156	Girshick	Lori B
1157	Giterman	Marlys
1158	Glass	Nancy
1159	Glazman	Jerry
1160	Glenn	Melody
1161	Glessner	Debra
1162	Glider	Rick
1163	Gnap	Rita
1164	Gochee	Aaron
1165	GODWIN	NANCY
1166	Goering	Melanie
1167	Goerke	Carol
1168	Goertemiller	Wilma
1169	Gold	Robert
1170	Goldansky	Robin
1171	Golding	H. Paul
1172	Golser	Wolfgang
1173	Gome	Jim
1174	Gomez	Angelica
1175	Gomez Murphy	Maria
1176	Gonthier	Claudia
1177	Gonzalez	Ester

	Last Name	First Name
1178	Goodberg	Cheryl
1179	Goodberg	Robert
1180	Goode	Will
1181	Gooding	Glenn J
1182	Goodman	Sue
1183	Goodpasture	Bryan
1184	goransonmiller	diane
1185	Gordon	Lynda
1186	Gorman	Catherine
1187	Gorton	Gregg
1188	Gosline	Ann
1189	Gotchall	Glenn
1190	Gourley	Geoff
1191	Goyal	Abhinav
1192	Graap	Sehriban
1193	Graf	Randy
1194	Graff	Terri
1195	Graffagnino	Frank
1196	Graffagnino	MaryAnn
1197	Graham	Fergus
1198	Graham	Matthew
1199	Granger	Susan
1200	Grant	Betty
1201	Grant	Brian
1202	Grant	Bruce
1203	Grant	Richard
1204	Gravel	John
1205	GRAVES	SANTEE
1206	Gray	John
1207	Gray	Linda
1208	Gray	Lynn
1209	Gray	Monica
1210	Grayson	Nancy
1211	Green	Dee
1212	Green	Jeff

	Last Name	First Name
1213	Green	Valerie
1214	Greenbank	John
1215	Greendorfer	Susan
1216	Greene	Dale
1217	Greene	Jeanine
1218	Greenwood	Charlene
1219	Greer	Cindy
1220	Greer	Helen
1221	Grego	Ted
1222	Gregory	Michael
1223	Gregory	Sheri
1224	Grenard	Mark Hayduke
1225	Gresham	Karen
1226	Greta	Cummings
1227	Gribbin	Jimmy
1228	grieves	kathy
1229	Griffes	Gordon
1230	Griffin	Glenn
1231	Griffin	Kathleen
1232	Griffin	Valerie
1233	Griffith	E.
1234	Grigel	Eric
1235	Grijalva	Adelita
1236	Grijalva	Adelita S
1237	Grimes	Clea
1238	Grindy	Laurel
1239	Grinnell	Richard
1240	Grinnell	rick
1241	Grizzle	Anna
1242	Grohs	Ron
1243	Groose	Robin
1244	Grosjean	Nancy
1245	Gross	Kade
1246	Grossman	Catherine
1247	Grossman	Janet

	Last Name	First Name
1248	Groth	Sherrie
1249	Group	Jon
1250	Grubbs	Bruce
1251	Gruber	Steve
1252	Grummell	Bonnie
1253	Guappone	Jeremiah
1254	Gubler	Thomas
1255	Guirreri	Ronald
1256	Gungor	Nancy
1257	Gunther	Jordie
1258	Gupta	Anuj
1259	Guthrie	Vicki
1260	Gutierrez	Grace
1261	Guymon	Michael
1262	Gwynn	Michael
1263	H	Patricia
1264	Haag	Brandon
1265	Haas	Rosemary
1266	Haber	Patsy
1267	Hagen	nadia
1268	Hagen	Scott
1269	Halcomb	Tad
1270	Hale	Brian
1271	Hale	Donna
1272	Hale	Mitch
1273	Hale	Patricia
1274	Halinen	Joshua
1275	Halkowitz	Connie
1276	Hall	Amber
1277	Hall	Matthew
1278	Hallett	Matt
1279	Hallett	Shirley
1280	Halley	Bret
1281	Halley	Dirk
1282	Halliday	Jen

	Last Name	First Name
1283	Halsell	Claudia
1284	Halversen	Susan
1285	Ham	Jacob
1286	Hamblin	Tom
1287	Hammond	Anthony
1288	hammond	Arlene
1289	Hammond	Janis
1290	Hammond	Sally
1291	Hampton	Kevin
1292	Hampton	Rema
1293	Hanby	Jeannette
1294	Hanchette	Adelyn
1295	Handforth	Mike
1296	Haner	Johnny
1297	Hanks	Rachel
1298	Hanna	Daniel
1299	Hannon	Jay
1300	Hannuksela	Adam
1301	Hansel	Elysia
1302	Hansen	Ramie
1303	Hanson	Barbara
1304	Hansotia	Noshir
1305	Hanta	Hashi
1306	Hanus	. Michael
1307	Harding	Margie
1308	Harenburg	Joanne
1309	Harig	Pamela
1310	Harker	Judith
1311	Harker	Lisa
1312	Harman	Carol
1313	HARO RODRÍGUEZ	JOSÉ MARTÍN
1314	Harper	Judith
1315	Harrington	David
1316	Harrington	W
1317	Harrington	W B

	Last Name	First Name
1318	Harris	Diane
1319	Harris	Frances
1320	Harris	Jerald
1321	Harris	Lynn
1322	Harris	Marilyn
1323	Harris	Michael
1324	Harrison	Rochelle
1325	Harshman	Richard
1326	Hart	Dennis
1327	Hart	Lee
1328	Hart	Lyn
1329	Hart	Stanley
1330	Hartgraves	Paula
1331	Hartley	Emily
1332	Hartman	Carl
1333	HARVEY	DONNA
1334	Hatcher	Jana
1335	Hauff	Steven
1336	Hauguel	Leo
1337	Hauth	Nancy
1338	Hawk	Cassie
1339	Hawk	Hazard
1340	Hawk	Viktoria
1341	HAWLEY	Laurie
1342	Hay	Steve
1343	Hay	Sydney
1344	Hay	Wendy
1345	Hayden-Boyd	Lori
1346	Hayduke Grenard	Mark
1347	Haynes	Rebecca
1348	Haywood	Sloane
1349	Heart	Sirius
1350	Heath	M.C.
1351	Heath	Tony
1352	Hedden	Chet

	Last Name	First Name
1353	Hedgpeth	Kathleen
1354	Hegedus	Josie
1355	Heidkamp	Rita
1356	Heikkila	Barbara
1357	Heil	Shawn
1358	Heilman Jr.	Ronald K.
1359	Heintz	Harry
1360	Heintz	Nancy
1361	Heinz	Matt
1362	Heitzmann	Kathleen
1363	Hejl	Janie
1364	Held	Lois
1365	Hendel	Ed
1366	Henderson	Marianne
1367	Henderson	WR
1368	Hendricks	Brent
1369	Hendrickson	Margaret
1370	Hendrix	Susan
1371	Henley	Jessica
1372	Hennessey	Christine
1373	Henriksen	James
1374	Henry	Jacque
1375	Henry	Kathleen
1376	Henry	Susanna
1377	Henry	Voncille
1378	herdliska	charlotte
1379	Herdrick	Sean
1380	Herk	Mary
1381	Herman	Brandon
1382	Herman	Frank
1383	Hermanson	Kristin
1384	Hernandez	Ramon
1385	Hernandez	Salma
1386	Hernandez	Whitney
1387	HERON	GERALD

	Last Name	First Name
1388	Heron	Veronica
1389	Herr	Robert
1390	Herritt	Caitlin
1391	Hesketh	Edwin
1392	Heslep	Susy
1393	Hess	Shelly
1394	Heule	Greg
1395	Heusinkveld	Dominika
1396	Heusinkveld	Timothy
1397	Hicks	Cynthia
1398	Hicks	Thomas
1399	HICKSON	DAVID
1400	Hiers	Lori
1401	Higley	Beverly
1402	Hilbert	James
1403	Hildebrand	Sharon L
1404	Hill	Jay
1405	Hill	Tara
1406	Hill	Vanessa
1407	Hinchliffe	JoAnn
1408	Hines	Rick
1409	Hinson	Katherine
1410	Hitchcock	John
1411	Hite	Mona
1412	Hlivko	Terry
1413	Hoag	Corolla
1414	Hoblitt	Marian
1415	Hoboy	Loren
1416	HOCEVAR	JOHN
1417	Hodes	Christopher
1418	Hodges	Rick
1419	Hodges	Sherri
1420	hodges	sherrri
1421	Hodgson	Mark
1422	Hoeffler	Alan

	Last Name	First Name
1423	Hoerr	Andrea
1424	Hoffman	Brandon
1425	Hoffman	Floyd
1426	Hoffman	John
1427	Hoffman	Natalie
1428	Hogg	Cindy
1429	Hoh	Erica
1430	Hoida	Barbara
1431	Hoke	Kathleen
1432	Holcombe	Cassie
1433	Holdaway	Michael
1434	Holdaway	Mike
1435	Holden	Jefferson
1436	Hollister	Laura
1437	Holly	Ryan
1438	Holm	Mary
1439	Holmes	Charles
1440	Holmes	Patrick
1441	Holmes	Richard
1442	Holmstrom	Marjorie
1443	Holt	James
1444	Holtgrewe	Jerry
1445	Holtgrewe	Susan
1446	Holwerda	Joel
1447	Homer	Rona
1448	Honchen	Vickie
1449	Hooker	Treven
1450	Hooper	Elaine
1451	Hooper	Sarah
1452	Hoover	Debbie
1453	Hoover	Kim
1454	Horn	Paul
1455	Horne	Joseph
1456	Horner	Ann
1457	Horness	Travis

	Last Name	First Name
1458	Horswill	Dawn
1459	Horton	Dan
1460	Horton	Daniel
1461	Horton	Deanna
1462	Horton	Noah
1463	Hotham	Sharon
1464	Hough	Eric
1465	Houghton	N
1466	Houser	Hattie
1467	Housler	Chad
1468	Howe	Laura
1469	Howe	Rebecca
1470	Howell	Jeff
1471	Howell	Laurie
1472	Huber	Joel
1473	Hudgens	Julie
1474	Hudspeth	Suzanne
1475	Huff	Donna
1476	Huffmon	Grace
1477	Hufford	Laurie
1478	Huggins	Roxana
1479	Hughes	Angela
1480	Hughes	John
1481	Hughes	Lindora
1482	Hughes	Michael
1483	Hughes	Peggy
1484	Huish	Ann
1485	Huley	Hilarie
1486	Hulsey	Wayne
1487	Hummell	Jessica
1488	Humphrey	Jack
1489	Hunsaker	Sara
1490	Hunter	Cynthia
1491	Hunter	Kathy
1492	Hunter	Larry

	Last Name	First Name
1493	Hupperts	Connie
1494	Hursh	Linda
1495	Hutchens	Christine
1496	Hutchins	James
1497	Hutchins	Katherine
1498	Hutchins	Maralan
1499	Hutchinson	Allen
1500	hutchinson	keeley
1501	Hyatt	Susan
1502	Ianchiou	Peter
1503	Ibarra	Ana-Maria
1504	Ice	Mary
1505	Iclozan	Mircea
1506	Ignatowicz	Michael
1507	Imig	Sarah
1508	Immel	Bette
1509	Intrieri	Carmen
1510	Iordanova	Veronica
1511	Irvin	Pamela
1512	Isabel	Chris
1513	Ishikawa	John
1514	Ituarte	Carlos
1515	Ivanov	Natasha
1516	Ives	Jeffrey D
1517	Ives	Karen
1518	Ives	Karen W
1519	J GALLAGHER	BARBARA
1520	Jackiw	Victoria
1521	Jacks	Frank
1522	Jackson	Randall
1523	Jackson	Reilly
1524	Jackson	Shawn
1525	Jacob	James
1526	Jacobs	Ben
1527	Jacobs	Kent

	Last Name	First Name
1528	Jacobs	Paul
1529	Jacobs	Sky
1530	Jacobs	Steve
1531	Jacobs	Trenise
1532	Jacobson	Michael R & Shoshana
1533	Jacobson	Steven
1534	Jacome	Alex
1535	Jacques	Nancy C
1536	Janke	Susan
1537	Janowitz-Price	Beverly
1538	Jardine	Michael
1539	Jarred	Georgia
1540	Jarrett	Zachary
1541	Jarvis	Heather
1542	JASINSKI	Tricia
1543	Jasso Selles	Laura
1544	Jayson	Pat
1545	Jefferson	Heather
1546	Jenkins	Brenda
1547	Jenkins	Claude
1548	Jenkins	Pamela
1549	Jennings	Mathew
1550	Jensen	Cornelia
1551	Jensen	Demi
1552	JENSEN	ROBERTA MAE
1553	Jepson	Jim
1554	Jesu	Verna
1555	Jin	Jason
1556	jJohnson	Rick
1557	Jo Sheldon-DiVito	Mary
1558	Joder	Greg
1559	Johnson	Aaron
1560	Johnson	Angela
1561	Johnson	Anissa

	Last Name	First Name
1562	Johnson	Brian
1563	Johnson	Carla
1564	Johnson	Cheryl
1565	Johnson	Chris
1566	Johnson	Ciera
1567	Johnson	Claudia
1568	Johnson	David
1569	johnson	jed
1570	Johnson	Julie
1571	Johnson	Keith
1572	Johnson	Lauri
1573	Johnson	Leander
1574	Johnson	Mansur
1575	Johnson	Nancy
1576	Johnson	Patricia
1577	Johnson	Richard
1578	Johnson	Rick
1579	Johnson	Sandy
1580	Johnson	Susan
1581	Johnson	Tatum
1582	Johnson	Tina
1583	JohnsonGoble	Connie
1584	Johnston	Sue
1585	Jolicoeur	Colette
1586	Jones	Barbara
1587	Jones	Brett
1588	Jones	Brian
1589	Jones	Eliott
1590	Jones	Feather
1591	Jones	Gary
1592	Jones	Janna
1593	Jones	Jennifer
1594	Jones	Johanna
1595	Jones	Linda
1596	Jones	Polly

	Last Name	First Name
1597	Jones	Richard
1598	Jones	Sharon
1599	Jones	Sue
1600	Jones	William
1601	Jonik	Mary
1602	Jordahl	Laiken
1603	Jordan	Fiona
1604	Jordan	Janice
1605	Jordan	Lois
1606	Jorgensen	Danyelle
1607	Jorgensen	Peter
1608	Joslin	Greg
1609	Jover	Kenneth
1610	Joy	Debbie
1611	Junion	Michael
1612	Juracka	Kathleen
1613	Jurs	Laurie
1614	Juth	David
1615	Kadyszewski	Katrina
1616	Kaemerle	Kate
1617	Kafer	Norma
1618	Kaffer	Kathryn
1619	Kagan	Dina
1620	Kahn	Brendon
1621	Kalbfleisch	JOHN
1622	Kalen	Vicki
1623	Kallgren	Lynn
1624	Kamprud	Mark
1625	Kamps	Paula
1626	Kana	Stephanie
1627	Kanarish	Lisa
1628	Kane	Susan
1629	Kanun	Carl
1630	Kanyer	Wyatt
1631	Kaplan	Matthew

	Last Name	First Name
1632	Karger	Gary
1633	Karn	Arthur
1634	Karneth	Kathy
1635	Karp	Robert
1636	Kasai	Lynne
1637	Kaszniak	Elizabeth
1638	katten	dc
1639	Katterman	Lee
1640	Kauahi	Gay Lee
1641	Kaufman	Roger
1642	Kautto	Gary
1643	Kaya	Barbara
1644	Kea	Ruth
1645	Keafer	Trina
1646	kearney	Marie
1647	Kearney	Mary
1648	Keays	Jeanine
1649	Keever	Vickie
1650	Kell	David
1651	KELLEY	WILLIAM
1652	KELLIE	CINDY
1653	KELLOGG	RUSSELL
1654	Kelly	Barbara
1655	Kelly	Brett
1656	Kelly	Flynn
1657	Kelly	Miriam
1658	Kelly	Patricia
1659	Kemmerer	Carol
1660	Kempton	Tami
1661	Kendall	Bernard
1662	Kennard	Bob
1663	Kennedy	Kathleen
1664	Kennedy Ice	Mary
1665	Kent	Diane
1666	Kent	Gary

	Last Name	First Name
1667	Kenyon	Deborah
1668	kershner	camille
1669	Kesselring	Greg
1670	Kessler	Heidrun
1671	Kester	Lenore
1672	Khalidi	Victoria
1673	Kierzek	Mary
1674	Kilroy	Dianna
1675	Kimpling	Phil
1676	King	Brian
1677	King	Chris
1678	King	Eugenia
1679	King	Jason
1680	King	Linda
1681	King	Todd
1682	Kingman	Barbra
1683	Kinney	Phillip
1684	Kinney	PK
1685	Kirchgatter	Benjamin
1686	Kirkland	William
1687	KIRKPATRICK	JENNIFER
1688	Kirvan	William
1689	Kissinger	Carole
1690	Klaproth	Steve
1691	Klawiter	Michelle
1692	Kleber	K
1693	kleber	keith
1694	Klein	Pat
1695	Kleinhenz	Peter
1696	Klement	Susan
1697	Kline	Carla
1698	Klose	Hans
1699	Knapp	Michael
1700	Knedlhans	Karen
1701	Knight	Anthony

	Last Name	First Name
1702	Knorr	Robert
1703	Knowles	Cybele
1704	Knutsen	Barbara
1705	Knutson	Riley
1706	Kober	Jarod
1707	Koch	Steve
1708	Kocher	Brandon
1709	Kock	Gabriela
1710	Koger	Patti
1711	Kokes	Kristina
1712	Kolwicz	Robin
1713	Kondolf	George Mathias
1714	Konkowski	Tom
1715	Korch	Margi
1716	Kordosky	Gary
1717	Kosanke	Joel
1718	Koshinz	Ronald
1719	Kosse	Kate
1720	Koty	Chris
1721	Kouvel	Alex
1722	Kovash	Chris
1723	Koven	Ed
1724	Kowalski	Nancy
1725	Kozma	John
1726	Kozura	J.
1727	Krajewski	Barbara
1728	Krall	Susan
1729	KRANTZ	SYDNEY
1730	KRAUCH	Kenneth
1731	Krause	Glenda
1732	Kraushaar	Nancy
1733	Kretsch	Don
1734	Kretsedemas	Nicholas
1735	Kriehn	John
1736	Krinks	Jerralynn

	Last Name	First Name
1737	Kroeger	James
1738	Krsjewski	Barbara
1739	Krueger	Rick
1740	Kruger	Fritz
1741	Kruse	Lois
1742	Kubalak	Joshua
1743	Kugler	Eva
1744	Kugler	Rose
1745	Kuhn	Brian
1746	Kullberg	Keven
1747	Kurtz	Carla
1748	Kurtz	Ken
1749	Kvam	Lindsay
1750	L Casale	Joan
1751	L Dean III	William
1752	L.	Ken
1753	La Falce	Stephen F.
1754	Labiner	David
1755	Labiner	David and Janis
1756	Labiner	Janis
1757	LaBorde	Lucie
1758	Lacher	Laurel
1759	Lacome	Michael
1760	Lacy	Lauren
1761	LACY	Steven
1762	LaFalce	Stephen
1763	Lagana	Jacob
1764	Lagas	Philip
1765	Lahr	Peter
1766	Laird	Jack
1767	LaLond	Sharon
1768	Lamb	Debby
1769	Lambert	Carol
1770	Lambert	Jonathan
1771	Lambrechtse	Rudolf

	Last Name	First Name
1772	Landa	Marty
1773	Landau	Katya Peterson & Pierre
1774	Landrum	Michael
1775	Lane	Joseph
1776	Lane	Laura
1777	Lane	Robert
1778	Laney	Linda
1779	Lang	Katarina
1780	Lang	Kent
1781	Lang	Sharon
1782	Langstaff	Larry
1783	Lanka	Mike
1784	LaPointe	Drena
1785	Laporte	Ricardo
1786	Lara	Martin
1787	Lara	Roger
1788	Laraway	Monique
1789	Lare	Dan
1790	Larson	Beth
1791	Larson	Kathy
1792	LASCH	KATHLEEN
1793	LaSchiava	Dona
1794	Lasham	Gary
1795	Laskarides	Angela
1796	Laspisa	Cecilia
1797	Lauzon	Vanessa
1798	Lavallee	Gerald
1799	Lavallee	Lia
1800	Lawson	Limell
1801	Lawson	Robert
1802	Lay	Nathan
1803	Layher	April
1804	Leach	Vince
1805	Leavitt	David

	Last Name	First Name
1806	Leavitt	Ellen
1807	LEDFORD	PATRICIA
1808	Ledo	Suzanne
1809	Lee	Amy
1810	LEE	BARBARA
1811	Lee	Gene
1812	Lee	George
1813	Lee	Mia
1814	Lee	Michael
1815	Lee	Monte
1816	Lee	Virginia
1817	Lee	Vivian
1818	Leetham	David
1819	LeFevour	Mary Kay
1820	Lehr	Gavin
1821	Leigh	Carolyn
1822	Lemieux	Jeanne
1823	Lemke	Florence
1824	Lemke	Pam
1825	Lentsch	Tom
1826	Lenz	Joy
1827	Leon	Gabriel
1828	Leon	Peter
1829	Leonard	Fred
1830	Lepley	Michael
1831	Leroy	Olivier
1832	Lesher	Jan
1833	Lesniak	Cyd
1834	LeSueur	Elizabeth
1835	Levey	David
1836	Levi Pyka	Kamil
1837	Levick	Lainie
1838	lewison	james
1839	Lewton	Quentin
1840	Lex	Harry

	Last Name	First Name
1841	Li	Elisabeth
1842	Li	John
1843	Libdan	J Lynette
1844	Libdan	Joyce
1845	Liber	Heather
1846	Liddle	Ronda
1847	Liedl	Jean
1848	Lierman	Milly
1849	Lightner	Joy
1850	Liguori	Diane
1851	Liles	Dennis
1852	Lillywhite	Lesley
1853	Linda	John
1854	Lindke	Karen
1855	Lindquist	Sarah
1856	Lindsay	Kathryn
1857	Linn	David
1858	Lippincott	Greg
1859	Lish	Christopher
1860	Lissner	Sidney
1861	Litecky	Mike
1862	Little	Connie
1863	Livermore	Richard
1864	Livingston	Jayden
1865	Lloyd	Gaye
1866	Lloyd	Marsha
1867	Lober	Linda
1868	Lobins	Laurie
1869	LoCicero-Walsh	Jessica
1870	Locke	Len
1871	Lockwood	Catherine
1872	LoCricchio	Ed
1873	LoGalbo	Krisanne
1874	Lombardi	Vic
1875	Lombardi	Victor

	Last Name	First Name
1876	Lombardo	James
1877	Lombardo	Jane
1878	Lomeli	Ben
1879	Long	Christopher
1880	Long	Lois
1881	Long	Mike
1882	Longmore	James
1883	Longshore	Bill
1884	Loon	Chloe
1885	loosli	maureen
1886	Lopez	Jason
1887	Lopez	Marco
1888	Lopez	Virginia
1889	Lopez Diaz	Dulce
1890	Lotz	Jake
1891	Lotze	Wendy
1892	Loucks	Cynthia
1893	Loveless	Marilyn
1894	Lovitt	Beda
1895	Lowell	Greg
1896	Lowery	Karen
1897	Lowes	Russell
1898	Lowis	Kerry
1899	Loy	Janet
1900	Loy	Kevin
1901	Luby	Richard
1902	Lucero	Barbara
1903	Lucero	Larry
1904	Luck	Kelli
1905	Lucky	Robin
1906	Ludwick	Lindsey
1907	Luebbermann	Susan Emley
1908	Luebbert	Dennis
1909	Luepke	John
1910	Luers	Dale

	Last Name	First Name
1911	Lujan	Erica
1912	Lukasko	J
1913	Lund	James
1914	Lund	Karen
1915	Lund	Kristi
1916	Lundstrom	Al
1917	Lunt	Lisa
1918	Luxenberg	Nina
1919	Lyman	Fred
1920	Lyman	Teresa
1921	Lynn	Cera
1922	Lynn	Marie
1923	Lynn	Olinda
1924	lynne	martha
1925	Lyon	Elizabeth
1926	lyon	michael
1927	Lyons	Mary
1928	Lysne	Holly
1929	Lytle	Mary
1930	M Clough	Stephen
1931	M. Araiza	Adalberto
1932	M. Porter	Kaye
1933	M.Keafer	Trina
1934	Macarty	Jami
1935	MacCalman	Kirsty
1936	Macey	George
1937	Mache	Frank
1938	Machek	Ann
1939	Macisaac	Zoe
1940	Mackean	Daniel
1941	MacKenzie	Stella
1942	Mackenzir	Anne
1943	MacNeil	dAnne
1944	Madden	David
1945	Madison	Tanya

	Last Name	First Name
1946	Madrid	Lisa
1947	Madrid	Luis
1948	Maestro	Betsy
1949	Magness	Rose
1950	MAGNOTTI	JEANMARIE
1951	magoffin	Caitlin
1952	Magruder	Marshall
1953	Mailloux	Todd
1954	Makes	Diana
1955	Maki	Ruth
1956	Malamas	Pamela
1957	Malcolm	Karen
1958	Maldonado	Jacob
1959	Maldonado	Sam
1960	Maleckaite	Vaida
1961	Mallory	Cheryl
1962	Malterre	Jean-Claude
1963	Mandel	Jan
1964	Mandeville	Dustin
1965	Mandler	James
1966	Mann	Jeffery
1967	Mann	Richard
1968	Manzer	Marlene
1969	Maravilla	Pablo
1970	Marek	Michael
1971	Marie	Chris
1972	Marin	Mark
1973	Marinello	Mike
1974	Marino	Dena
1975	Marisa	Sara
1976	Markey	Susan
1977	Markheim	Daniella
1978	Markow	Ann
1979	Marks	Kathy
1980	Marley	Mark

	Last Name	First Name
1981	Marlin	Nicole
1982	Marlow	Andrea
1983	Marne	Marielle
1984	Marolf	Walter
1985	Marques	Nathan
1986	Marschner	Richard
1987	Marshall	Kaylee
1988	Marshall	Robin
1989	Martin	Dawn
1990	Martin	Jean
1991	Martin	Patrick
1992	Martin	Robert
1993	Martin	Theresa
1994	Martin	Wendell
1995	Martin III	Robert
1996	Martindale	Kevin
1997	Martinek	Kathleen
1998	Martinez	Irene
1999	Martinez	JD
2000	Martinez	Luis
2001	Martinez	Valentina
2002	Mason	Brenda
2003	Mason-Gere	Loren
2004	Massie	Sherry
2005	Masssro	Diana
2006	Masters	Michael
2007	Masterson	Jeffrey
2008	MASUDA	Carol
2009	Mathes	Barbara
2010	Mathes	Horst
2011	Matthew	Tom
2012	Matthew	Tom and Laura
2013	mattox	kathy
2014	Mauet	Sarah
2015	Mauger	Jacques

	Last Name	First Name
2016	Maury	Judy
2017	Mawk	Rob
2018	MaxeySchuetze	Carolyn
2019	Maxwell	Maurynne
2020	May	Rose
2021	Mayes	Lee
2022	Maynard	John
2023	Mayora	Katherine
2024	Mboussou	Moise
2025	McAllister	Derek
2026	McAllister	Peter
2027	Mcanally	Tim
2028	McBride	Kari
2029	McCabe	Elizabeth
2030	McCabe	Michael
2031	McCann	Jessica
2032	McCarty	Kimberly
2033	McCarty	Tom
2034	mccormack	mary
2035	McCormick	Gary
2036	McCormick	Mike
2037	Mccorry	Faye
2038	McCoy	Douglas
2039	MCCOY	LUCILLE
2040	McCraren	Sarah
2041	McCullough	Charolett
2042	McCullough	Slade
2043	McDermott	Ann
2044	McDermott	Ryan
2045	McDevitt	Bryan
2046	McDonald	Charles
2047	Mcdonald	Michelle
2048	McDonald	Porter
2049	Mcdonald	Robert
2050	McDonald	Steven

	Last Name	First Name
2051	McDonald	Sylvia
2052	McDonnell	Matt
2053	McDonough-Means	Sharon
2054	McDowell	Michael
2055	MCDOWELL	SCOTT
2056	McElveen	Alan
2057	McElwain	Sharon
2058	McFarland	John
2059	McGaughey	Peggy and George
2060	McGee	Tyler
2061	McGhee	Beverly
2062	McGill	James and Janet
2063	McGill	Payson
2064	McGillis	Kevin
2065	McGrath	Cathay
2066	McGrath	Cathy
2067	McGrath	Joseph
2068	McIvor	Catherine
2069	McKee	Brian
2070	McKellip	Maureen
2071	McKeon	George
2072	Mckinney	Jason
2073	McLaughlin	David
2074	McLean	Janey
2075	McLean	Normetta
2076	Mcleod	Scott
2077	Mcmain	Caryn
2078	McMillan	Angie
2079	McNally	Jef
2080	McNally	Jim
2081	McNamara	Anita
2082	McPherson	Robert
2083	McRae	Beth
2084	McRill	Cheryl
2085	McSpadden	Russell

	Last Name	First Name
2086	McWilliams	Mike
2087	Meade	Alayna
2088	Meade	Annie
2089	Meadow	Vic
2090	Meadows	Amber
2091	Mealer	John
2092	Mealka	Ron
2093	Means	Andrew
2094	Mears	Ed
2095	Mecum	Barb
2096	Mecum	Robert
2097	Medina	Alejandro
2098	Medina	Andres
2099	Medina	Donald
2100	Medrano	Andrea
2101	Medvin	Joseph
2102	Megnet	Grace
2103	Mehrer	Julia
2104	Meikle	Barry
2105	Meister	Mary
2106	Meister	Nancy
2107	Meister	Sam
2108	Melby	Gary L
2109	Melcher	Mary
2110	Melchert	Noreen
2111	Mello	Phillip
2112	Melton	Deborah
2113	Melville	Jason
2114	Mendez	Joseph
2115	Mendoza	Priscilla
2116	Mercer	Judy
2117	Mergen	David.
2118	Merino	Arthur
2119	Merrill	Clay
2120	Merritt	Charles

	Last Name	First Name
2121	Mertz	Jason
2122	Metcalf	Patricia
2123	Meunier	Doris Elizabeth
2124	Meyer	Dan
2125	Meyers	Gary
2126	Meyers	Rebecka
2127	Meza	Erick
2128	Meza	Kim
2129	Micciulla	Adriana
2130	Michaud	Barbara
2131	Michaud	Lizann
2132	Mick	Rick
2133	MIDDLETON	TAL
2134	MIDKIFF	Eva
2135	Mier-Welborn	Mead
2136	Mike	Weng
2137	Mikus	Karen
2138	Milbrath	Mary
2139	Miles	Julie
2140	Milewski	Susan
2141	Milich	June
2142	Milich	Lenard
2143	Miller	David
2144	Miller	Elizabeth
2145	Miller	Glenn
2146	Miller	Henry
2147	Miller	Jeremy
2148	Miller	John
2149	Miller	John E
2150	Miller	Laurel
2151	Miller	Lela
2152	Miller	Logan
2153	Miller	Patricia
2154	Miller	Shauna
2155	Millett	Peg

	Last Name	First Name
2156	Milligan	Rhonda
2157	Milliken	Gerry
2158	Millis	Penny
2159	Millis-Peters	Penny
2160	Millius	Mike
2161	Mills	Nancy
2162	Milner	Joan
2163	Minadeo	Melody
2164	Mirocha	Anna
2165	Miron	Marlene
2166	Mirzaeipour	Mandana
2167	Mischle	Christine
2168	Mishaga	Gregory
2169	Mitchell	Marie
2170	Mitchell	Yolanda
2171	Mixon	Richard
2172	Mizell	Melanie
2173	Mockbee	Joy
2174	Mockler	Karen
2175	Moddelmog	Emily
2176	Modisett	David
2177	Moehlman	Bruce
2178	Mohlenkamp	Gary
2179	Molina	Teresa
2180	Moll	Brian
2181	Molnar	Micala
2182	Mondragon	April
2183	Money	Joan
2184	Money	Tom
2185	Montalvo	Monica
2186	Montano	Robert
2187	Montes	Sue
2188	Montoya	Arturo
2189	Montoya	Loralee
2190	Moodie	Christina

	Last Name	First Name
2191	Moody	Christi
2192	Moon	Linda
2193	Mooney	Jared
2194	Mooney	Mary
2195	Moonshadow	Moonshadow
2196	Moore	Barbara
2197	Moore	Ginger
2198	moore	Joseph
2199	Moore	Nancy
2200	Moran	Humberto
2201	Moran	James
2202	Moran	Paul
2203	More	Syver
2204	Morellato	Luca
2205	Morelock	Eric
2206	Moremail	YogaDair
2207	Moreno	Denise
2208	Moretti	Mark
2209	Morey	Albert
2210	Morgan	Alexa
2211	Morgan	Elizabeth
2212	Morgan	Terry
2213	Morin	Carla
2214	Morneau	Dennis
2215	Morris	Jason
2216	Morris	Laurelle
2217	Morris	Shane
2218	Morris	Wendy
2219	Morrison	Jerene
2220	Morrow	Terri
2221	Mortensen	Michael
2222	Morton	Liz
2223	Moscato	Jennifer
2224	Moser	Mary
2225	Moss	Stacy

	Last Name	First Name
2226	Mount	Pat
2227	Mouras	Melanie
2228	Mouras	Theodore
2229	Mowris	Gerald
2230	Moyer	Michelle
2231	Mozolik	Andrea
2232	Mueller	Donna
2233	Mueller	Kerstin
2234	Muirhead	Julie
2235	Mulcahy	Susan
2236	Mullins	Rev
2237	Muma	Allen
2238	Munoz	George
2239	Munoz	Julie
2240	Munro	Elva
2241	Murdock	Robert
2242	Murillo	Brandon
2243	MURPHY	CHARLOTTE
2244	Murphy	Cindy
2245	Murphy	Dacia
2246	Murphy	John
2247	Murphy	Katherine
2248	Murphy	Maria
2249	Murphy	Susan
2250	Murray	John
2251	Murray	Larry
2252	Murray	Scott
2253	Murray	Sister Victoria Murray
2254	Murray	Wes
2255	Murt	Michael
2256	Murveit	Anna
2257	Muscato	John
2258	Myers	Dana
2259	Myers	Howard

	Last Name	First Name
2260	Myers	Ted
2261	MYLES	BRYE
2262	N. Swersey	Mary
2263	Naccarato	Sharon
2264	NADEAU	CON
2265	Nagel	Dennis
2266	Nagorzanski	Walter
2267	Nakkrn	Ken
2268	Nalbach	Glenn
2269	Nannetti	Jennifer
2270	nape	clarice
2271	Nash	Jenn
2272	Nash	Thomas
2273	Nasif	Maria
2274	Nasif	Roman
2275	Nava	Ruben
2276	Navarro	Alberto
2277	Navarro	Eleanor
2278	Navarro	Loba
2279	NEAL	Travis
2280	Needy	Jody
2281	Neely	Nancy
2282	Nehrmeyer	Matt
2283	Neill	Derek
2284	Neill	Joan
2285	Neils	Aletris
2286	Nejedlo-Gregg	Mary
2287	Nell	Patricia
2288	Nelson	Brenda
2289	Nelson	David
2290	Nelson	Diana
2291	Nelson	Michael
2292	Nelson	Suzanne
2293	Nelson	Thomas
2294	Nester	Patricia

	Last Name	First Name
2295	Neumann	Michael
2296	Neumann	Ren&#65533;e
2297	Neumann	Renee
2298	Neumann	Renée
2299	Nevine	Marcus
2300	Nevins	Jaimee
2301	Newell	Patrick
2302	Newitt	Dennis
2303	NEWITT	Mary
2304	Newport	Audrie
2305	Niccum	Ryan
2306	Nichols	James
2307	nichols	nichols
2308	Nicholson	Bruce
2309	Nielsen	Steve
2310	Nielson	Daniel
2311	Niemi	Penny
2312	Nilson	Dawn
2313	Nilsson	Mike
2314	Nisson	J. Nicholas
2315	Nisson	James
2316	Niven	Molly
2317	Nix	Jean
2318	Nixon	Sherrie
2319	Noble	AJ
2320	Noble	Elizabeth
2321	Noell	Silvia
2322	Nolan	Kay
2323	Noland	Sharon
2324	Nolen	Terry
2325	Noll	Sharon
2326	Nolty	Peggy
2327	nordstrom	jay
2328	Normandia	Mary
2329	Norris	Nedra

	Last Name	First Name
2330	Norris	Stacie
2331	North	Darcel
2332	North	Loren
2333	Norton	Bradlee
2334	Notestine	James
2335	Notsch	Glenn
2336	Nottingham	Lois
2337	Nousen	Karen
2338	novak	leif
2339	Nowak	Diane
2340	Nowlin	John
2341	Nugent	Rosemary
2342	Nye	Mickie
2343	Nzalakanda	Perpignant
2344	O Connor	Janet
2345	O. Torre	Felipe
2346	O'Brien	Dorian
2347	O'Brien	William
2348	Ocock	Craig
2349	Oemcke	Barbara
2350	Ogden	James
2351	Ogdon	Kira
2352	Ogola	Kira
2353	O'Hanlon	Larry
2354	OHiggins	Judy
2355	Ohler	David
2356	Ohmann	Karen
2357	Ojeda	Armando
2358	O'Keeffe	David
2359	OLDS	ALLAN
2360	Oliphant	Judy
2361	Olivares	Anne
2362	Oliver	Barbara
2363	Oliver	Bonnie
2364	Olkiewicz	Craig

	Last Name	First Name
2365	Ollerhead	Peggy
2366	Olmstead	Katherine
2367	Olmstead	Scott
2368	Olsenius	Christine
2369	Oman	David
2370	O'Mara	Erin
2371	ONeal	Isabel
2372	O'Neil	Rachel
2373	ONeill	Denny
2374	ONeill	Sheryl
2375	O'Neill	Dodd
2376	Oravetz	Roger
2377	Orcutt	Mike
2378	Orkney	Garth
2379	O'Rourke	John
2380	O'Rourke	Melissa
2381	Orozco	Joe
2382	Orozco	Valorie
2383	Ortiz	Tracy
2384	Orton	Andrew
2385	Osborne	Robert
2386	Osborne	Valerie
2387	Oscherwitz	Steven
2388	OSheil	Jeff
2389	Oslik	Deborah
2390	Osmun	Roger
2391	Osteen	Steve
2392	Oswald	Laurinda
2393	Oswald	Wes
2394	Ott	Dale
2395	Ott	Peter
2396	Oviedo	Myriam
2397	Owen	Eileen
2398	Owens	James
2399	Owens	Mark

	Last Name	First Name
2400	Owens	Mavis
2401	Oxenhandler	Lucy
2402	Ozias	Marlies
2403	PÃ©ron	MC
2404	Pacheco	Adrian
2405	Pacheco	Mario
2406	Packard	Peter
2407	Padilla	Delores
2408	Padilla	Miguel
2409	padilla	raul
2410	Page	George
2411	Page	Robert
2412	Painter	Joen
2413	Paitson	Jeff & Shirlee
2414	Pakulis	Maria
2415	Pal	M
2416	Palese	Nicole
2417	Palmer	Madeline
2418	Palmer	Rayna
2419	Palumbo	Jean
2420	Pape	Barbara
2421	Papka	Bill
2422	Parish	Martin
2423	Parisi	Tami
2424	Parker	Beverly
2425	Parker	Billy
2426	Parker	Brenda
2427	Parker	Carol
2428	Parker	Chris
2429	Parker	Deborah
2430	Parker	Judith
2431	Parker	Sandra
2432	Parker	William
2433	Parkhurst	Nicole
2434	Parkin	Michael

	Last Name	First Name
2435	Parkinson	Wayne
2436	Parks	Katherine
2437	Parks	Richard
2438	Parr	Carmel
2439	Parr	Robert
2440	Parris	Joel
2441	Parry	Ronald
2442	Parsons	Jill
2443	Partington	Phil
2444	Passe	Gary
2445	Patterson	Deborah
2446	Patterson	Dianne
2447	Paul	Linda
2448	Pawloski	Linda
2449	Payne	Deborah
2450	Pearce	Rick
2451	Pearcy	Elizabeth
2452	Pearman	Timothy
2453	Pearson	Caryl
2454	Pearson	Marie
2455	Peck	Jesse
2456	Pedersen	David
2457	Pedigo	Kay
2458	Pelleran	Jay
2459	Pellerito	Denise
2460	penaloza	jesse
2461	Pence	Izaak
2462	Penick	Randy
2463	Penrod	JD
2464	Penrod	Michael
2465	Pentecost	Juan
2466	Perelman	Cristina
2467	Perez	Patsi
2468	Perigon	Marie-Claude
2469	Perkins	Karen

	Last Name	First Name
2470	Perkins	Ron
2471	Perre	Michele
2472	Perry	John
2473	Perry	Joy
2474	Perry	Robert
2475	Perry Jr.	John
2476	Peternel	Nadine
2477	Peters	Matt
2478	Peters	Robert
2479	Peterson	Christina
2480	Peterson	Joan
2481	Peterson	Kenneth
2482	Peterson	Mark
2483	Petrich	Marilyn
2484	Petty	Kevin
2485	Pevarnik	Joan
2486	Phillips	Weslie
2487	Phillips-Mao	Laura
2488	Phipps	Sandra
2489	Piedad	Kristine
2490	Piekarz	Delores
2491	Piel	Mary Ellen
2492	Pier	Victoria
2493	Pierce	Barbara
2494	Pierce	John
2495	Piercy	Jennifer
2496	Pikula	William
2497	Pilloud	Bridget
2498	Pina	Rene
2499	Pine	Rob
2500	Pio	C
2501	Pitts	Doug
2502	Pitts	Mark
2503	Plauche	Sandra
2504	Playdon	Cheryl

	Last Name	First Name
2505	Pletschet	Fran
2506	Plotkin	Rabbi
2507	Plum	John
2508	Poessel	Sharon
2509	Poglajen	Val
2510	Poindexter	Wanda
2511	Poland	Adam
2512	Pollack	Anne
2513	POMEROY-FULTON	MARYANNE
2514	Pompeo	Kim
2515	Ponce	Brando
2516	Pooley	David
2517	Popovich	Kelly
2518	Porter	Candace
2519	Porter	Kaye M.
2520	Porter	Kenneth
2521	Potinsky	Mandy
2522	Potts	Gail
2523	Powell	Joan
2524	Powell	Larissa
2525	Powell	Sherri
2526	Powers	David
2527	Powers	Stanley
2528	Powers	Trevor
2529	Pratt	David
2530	Prehn	Shannon
2531	Prentiss	Patricia
2532	Prescott	Alexander
2533	Prescott	Patricia
2534	Prescott	Robert
2535	Presnell	Virginia
2536	Price	Bev
2537	Priedolin	Joe
2538	Priester	Christine
2539	Prieto	Alejandro

	Last Name	First Name
2540	Prim	Jerald
2541	Prince	Richard
2542	PRINCE	SUSAN
2543	Prochera	Jonathan
2544	Procopio	Thomas
2545	Proebster	Brandon
2546	Prophet	Annette
2547	Pruitt	Melissa
2548	Przybylski	Terrence
2549	Psckard	Peter
2550	Puchta	Lisa
2551	Puckett	Katie
2552	Puglia	Mary
2553	Puleston	Jessica
2554	Pulkrabek	Mary
2555	Pumphrey	Brenda
2556	Punt	Leon
2557	Purdon, MD	Thomas F
2558	Pursley	Tarquin
2559	Purtzer	Tom
2560	Purvis	Cheryl
2561	Putman	Laura
2562	Putnam	Claudia
2563	putnam-hidalgo	betts*
2564	Putney	April
2565	Puttock	Georgia
2566	Puttuck	Madilee
2567	Pyka	Kamil
2568	Queisser	Henne
2569	Quinn	Janet
2570	Quintana	Eduardo
2571	QUINTANA	VALERINA
2572	Qureshi	Darian
2573	R	C
2574	Rachi	Romeo

	Last Name	First Name
2575	Racine	Robert
2576	Radam	Mark
2577	Radarian	Forrest
2578	Rader	Jef
2579	Rader	Klif
2580	Radke	Marcia
2581	Raftery	Heather
2582	Ragan	Daryl
2583	Ragland	Morris
2584	Rahilly Jasmer	Shelby
2585	Ralls	Kenny
2586	Ramey	Wade
2587	Ramirez	Jessica
2588	Ramos	John
2589	Ramos-Rios	Rosa
2590	Ramsey	Michael
2591	Ramseyer	Judith
2592	Ramurez	Raul
2593	rancourt	shannon
2594	Randall	Sean
2595	Randell	Dean
2596	Rankin	Holly
2597	Rasmussen	Riley
2598	Rass	Michael
2599	Rathbun	John
2600	Rathburn	Robert
2601	Ratliff	Margaret
2602	Ravits	Emily
2603	Rawlings	Anna
2604	Ray	Jason
2605	Rayman	Jennifer
2606	RAYNOR	Jed
2607	Read	Gina
2608	Rebeka	Bob
2609	Rechkemmer	Marlys

	Last Name	First Name
2610	Rector	Crystal
2611	Redfield	Shawn
2612	REDMOND	RANDY
2613	Redzinak	Jim
2614	Reeck	Dirk
2615	Reed	James
2616	Reed	Roberta
2617	Reed	Robin
2618	Reel	Sally
2619	Reese	Joe
2620	Reeve	Katherine
2621	Reichenberger	Sharon
2622	Reichert	Charlotte
2623	Reid	Fiona
2624	Reid	Gary
2625	Reill	Carol
2626	Reilly	Laura
2627	Reineke	Yvonne
2628	Rella	Maria
2629	Renkes	Saelon
2630	Reuter	Barbara
2631	Reville	Oliver
2632	Reyes	Caleb
2633	Reyes	Luz
2634	Reynolds	Barbara
2635	Reynolds	Bryon
2636	Reynolds	Waid
2637	Rezac	Melissa
2638	Rhoades	Casey
2639	Rhoades	Karen
2640	Rhoades	Robyn
2641	Ribeiro	Adelle
2642	Rice	Gillian
2643	Rice	Mallory
2644	Richards	Bill

	Last Name	First Name
2645	Richards	Jacob
2646	Richards	Lynn
2647	Richards	Wayne
2648	Richardson	Barbara
2649	Richardson	Don
2650	Richardson	Rebecca
2651	Richardson	Todd
2652	Richey	Michael
2653	RICHMOND	Clifford
2654	Richt	Crystal
2655	Richter	Joan
2656	Richtq	Crystal
2657	Riddle	James
2658	Rider	Dara
2659	Riep	Louis
2660	Ries	Don
2661	Riggin	Korina
2662	Riggs	Kaysha
2663	Riley	Deborah
2664	Riley	Mary
2665	Riley	Michael
2666	Riley	Rene
2667	Rilling	Ann
2668	Rings	Sally
2669	RINGWALD	SHAWN
2670	Rios	Elisa
2671	Ristow	Ellen
2672	Ritacca	Jenniene
2673	ritchey	deni
2674	RITCHEY	JAY
2675	Ritchey	Jeneva
2676	Ritter	Philip
2677	Rivera	Irene
2678	Rivers	Roger
2679	Riyl	Myreld

	Last Name	First Name
2680	Roach	John
2681	Roati	Ezra
2682	Robbins	Alan
2683	Roberson	Lynn
2684	Roberts	Bob
2685	Roberts	Molly
2686	Roberts	Sarah
2687	Robertson	Beth
2688	Robie	Chris
2689	Robinette	Ronald
2690	Robino	Jeff
2691	Robinson	Brian
2692	Robinson	Donna
2693	Robinson	Eben
2694	Robinson	Gabriel
2695	Robinson	Kate
2696	Robinson	Kay
2697	Robinson	Tara
2698	Robles	George
2699	Robson	Craig
2700	Rocha	Angie
2701	Rock	Sharon
2702	Rodgers	Ken
2703	Rodgers	Richard
2704	Rodgers	Steven
2705	Rodoni	Michael
2706	Rodrigues	Pam
2707	Rodriguez	Efrain
2708	Rodriguez	Philip
2709	Rodriguez	Robert
2710	Rodriguez	Susan
2711	Roelfs	Erica
2712	Roether	Nichole
2713	Rogers	April
2714	Rogers	Aric

	Last Name	First Name
2715	Rogers	Celeste
2716	Rogers	Duane
2717	Rogers	Jeff
2718	Rogers	Julie
2719	Rogers	Melissa
2720	Rogers	Sarah
2721	Rogers Faust	Marianne
2722	Rohlik	Leonard
2723	Rojko	Laura
2724	Rolando	Orville
2725	Rold	Stephen
2726	Romeo	Richard
2727	Romero	Raynaldo
2728	Romero	Regina
2729	Romo	Roland
2730	Ronan	Susan (Sasha)
2731	Roncevich	Thomas
2732	Ronning	Robert
2733	Rosato	Teresa
2734	Rose	Jeff
2735	Rose	M
2736	Roseberry	Judith Joan
2737	Rosenberg	Catherine
2738	Rosenfield	Michael
2739	Rosete	Rudy
2740	Ross	Cynthia
2741	Ross	Joe
2742	Ross	Karine
2743	Ross	Sandra
2744	Rossbach	Richard
2745	Rossetter	Pam
2746	Rossetter	Pamela
2747	Rossi	Cara
2748	Rossi	Nicholas
2749	Rosso	Brit

	Last Name	First Name
2750	Rosso	John
2751	Roth	Daniel
2752	Roth	Johna
2753	Rothrock	Leilani
2754	Rothschild	Sebastian
2755	Rowe	Tycho
2756	Rowlands	Anita
2757	Rowlett	Bonnie
2758	Royal	Michelle
2759	Roybal	Valerie
2760	Rubin	Evyn
2761	Ruck	West
2762	Rudolph	Allan
2763	Rudolph	Carol
2764	Rudolph	Dar
2765	Rudolph	Darlene
2766	Ruggiero	Ralph
2767	Rule	Renee
2768	Running	RAEchel
2769	Running Bear	Ben
2770	Rusch	Doris
2771	Rush	John
2772	Rushlow	Roger
2773	Russell	Candace
2774	Russell	Douglas
2775	Russell	Ellen
2776	Russell	Suzette
2777	Russo	Marilee
2778	Rustand	Eric
2779	Rutledge	Reta
2780	Ryan	Wendy
2781	Ryder	Angela
2782	S	Diana
2783	s	lorna
2784	S Scantlebury	E

	Last Name	First Name
2785	Saady	Vivianne
2786	Saavedra	Valentina
2787	Sabbara	Serena
2788	Saber	DeeAnn
2789	Saenz	Dolores
2790	Sage	Ricky
2791	Sahagun	Leean
2792	Salas	Cynthia
2793	Salgado	Angel
2794	Salgado	Luis
2795	Saling	Frederick
2796	Samorano	Fermin
2797	Sample	Edward
2798	Sample	Stephen
2799	Sanchez	Art
2800	sanchez	steve
2801	Sandberg	Barbara
2802	Sanders	Darren
2803	Sanders	Peggy
2804	Sanders	Ted
2805	Sanderson	Joss
2806	Sanderson	Melissa
2807	Sanford	Michael
2808	Santangelo	Roseann
2809	Santiago	Luis
2810	Santo	Elaine
2811	Sapp	Robert
2812	Saraydarian	Stephen
2813	Sardo	Steven
2814	Sarkozy	John
2815	Sartain	Karen
2816	Saunders	Elizabeth
2817	Sautter	Andrea
2818	Sautter	Tim
2819	Savitch	Steve

	Last Name	First Name
2820	Savitch	Steven
2821	Saxer	Jerry
2822	Saxler	Courtney
2823	Saxton	Rolland
2824	Scantlebury	E S
2825	Schaefer	Aster
2826	Schafer	Robert
2827	Schafer	Sally
2828	Schauer	Elizabeth
2829	Scheinkman	Tracy
2830	Schermer	Linda
2831	Schlosser	Edward
2832	Schlott	Jo Ann
2833	Schmickle	Tami
2834	Schmidt	Jan
2835	Schmidt	Paul
2836	Schmidt	Royle
2837	Schmidt	Thomas
2838	SCHMIERER	Kyle
2839	Schmitz	Connie
2840	Schmonsees	William
2841	Schmuck	Susan
2842	Schnaufer	Chris
2843	Schneebeli	Joan
2844	Schnitzel	Judith
2845	Schoenbach	Neal
2846	Scholten	Andrew
2847	Scholten	Sheri
2848	Schoolman	Mark
2849	Schott	Jack
2850	Schrecker	Cyndi
2851	Schrier	Phyllis
2852	Schroeder	Patricia
2853	Schroeter	Rogil
2854	Schuck	Vicki

	Last Name	First Name
2855	Schueller	Jim
2856	Schug	Larry
2857	Schuhrke	Nancy
2858	Schuitt	G. Paul
2859	Schukei	Aja
2860	Schulte	Nancy
2861	Schultz	Christopher
2862	Schultz	Margot
2863	Schumacher	Linda
2864	Schwamberger	Chris
2865	Schwartz	Isabel
2866	Schwartz	Jake
2867	Schweigert	Clint
2868	Sciannameo	Joseph
2869	Scott	Gary
2870	Scott	Kate
2871	Scott	Mary
2872	scott	SUSAN
2873	Scott	Willis
2874	Scott-Graham	Connie
2875	Scurran	Joan
2876	Scutier	Patricia
2877	Seager	James
2878	Seamon	John
2879	Sear	Tracy
2880	Sedita	Michael
2881	Seeley	Joanna
2882	Segovia	Francisco
2883	Seikel	Erik
2884	Selanders	Dan
2885	Selby Nierenhausen	Katheryn
2886	Sellers	Jennifer
2887	Seltzer	Cherie
2888	Semler	Shelley
2889	Sendek	Anthony

	Last Name	First Name
2890	Senderovich	Joe
2891	SENDMEYER	FLOYD
2892	Senski	Vincent
2893	Serna	Sonya
2894	Servais	Kristine
2895	Servais	Thomas
2896	Serwin	Deb
2897	SESSIONS	JULIE
2898	SESSIONS	KEVIN B
2899	Sessions	Ronald
2900	sferra	susan
2901	Sgroi	J
2902	Sgroi	Jacqueline
2903	Shaffer	Mike
2904	Shakarian	Jana
2905	Shank	Ritch
2906	Shanker	Howard
2907	Shanley	Roger
2908	Shapiro	Aggie
2909	Shapiro	Eve
2910	Sharp	Angie
2911	Sharp	Todd
2912	Sharrer	Raymond
2913	SHAW	JEANNE
2914	Shaw	Jeffrey
2915	Shaw	Lauren
2916	Shaw	Tammy
2917	Shawcroft	Lisa
2918	Sheehan	Margret
2919	Sheehan	Michael
2920	Sheehy	Chuck
2921	Sheele	Kevin
2922	Sheldon DiVito	Mary Jo
2923	Sheldon-DiVito	Mary Jo
2924	Shelley	Travis

	Last Name	First Name
2925	Shelton	BRUCE
2926	Sheperd	JoAnn
2927	Shepherd	Daniel
2928	Sheppard	Jacob
2929	Sherer	Rustyn
2930	Sherman	Charles
2931	Sherman	Julie
2932	Sherman III	Elven E.
2933	Shimek	Pamela
2934	Shinsky	Carol
2935	Shipek	Catlow
2936	Shipley	Jason
2937	Shipley	Ross
2938	Shipman	Joy
2939	Sholtis	Judith
2940	Shook	Philip
2941	Shoopman	Ron
2942	Shores	Michael
2943	Short	Kimberly
2944	Showalter	Dianne
2945	Shrader	Gregory
2946	Shuhman	Phonda
2947	Shulman	Fred
2948	Shulman	Rhoda
2949	Shum	Marvin
2950	Sides	Laura
2951	Siedschlag	Robert
2952	Siegel	Matthew
2953	Sieland	Richelle
2954	Siewert	Barbara
2955	Sillers	Bruce
2956	Silva	Jim
2957	Silva	Tony
2958	Silverman	Susan
2959	Silverthorn	Amy

	Last Name	First Name
2960	SIMMONS	MICHAEL
2961	Simpson	Hyatt
2962	Sinclair	Cynthia
2963	Sinclair	Mary
2964	Sinclair	Ryan
2965	Sinclair	Scott
2966	Singer	Dawn
2967	Singer	Susan
2968	Singkofer	Steve
2969	Singletary	Melissa
2970	Sipp	Carissa
2971	Sivilli	Richard
2972	Skeldum	Dick
2973	Skinner	Richard
2974	Skorich	Janet
2975	Slabaugh	Bryan
2976	Slater	Dawn
2977	Sledge	Duane
2978	Sledge	Leslie
2979	Sledge	Pat
2980	Sloan	Judy
2981	Sloane	Merryl
2982	Sluka	Aileen
2983	Smart	Robin
2984	Smiih	Walter
2985	Smiley	Jaimi
2986	Smith	Anna
2987	Smith	Beverly
2988	Smith	Dana
2989	Smith	Deanna
2990	Smith	Donald
2991	Smith	Donna
2992	Smith	Greg
2993	Smith	Jacquelyn
2994	Smith	Jan

	Last Name	First Name
2995	Smith	Jeff
2996	Smith	Linda
2997	Smith	Martin
2998	Smith	Meghan
2999	Smith	melissa
3000	Smith	Norene
3001	Smith	Norman
3002	Smith	Oval
3003	Smith	Peter
3004	Smith	Rebecca
3005	Smith	Terry
3006	Smith	William
3007	Smitherman	Fran
3008	Snedeker-Folkerth	Stephanie
3009	Snowden	Odell
3010	Snyder	Donna
3011	Snyder	Hailey
3012	Snyder	Jeff
3013	Snyder	Linda
3014	Snyder	Nancy
3015	Snyder	Ray
3016	Snyder	Stephen
3017	Sofia	Anna
3018	Soine	John
3019	SOLANKY	ANIL
3020	Solano	Emilio
3021	Solard	Alison
3022	Soley	Scott
3023	Solis	Damalia
3024	Soll	Hugo
3025	Sollenberger	Stephen
3026	Solsten	Dr. Richard
3027	Soltis	Susan
3028	Sondburg	Bryan
3029	Sonne	Leslie

	Last Name	First Name
3030	Sorgi	Edward
3031	Sorri	Mari
3032	sos	mike
3033	Spadaro	Karen M
3034	Spann	Cheryl
3035	Sparrow	Deb
3036	Specht	Craige
3037	Spencer	Joe
3038	Spencer	Sabrina
3039	Spencer-Glasson	Janine
3040	Spersrud	Dean
3041	Spiecker	Kevin
3042	Spiers	Barbara
3043	Spies	Charles
3044	Spies	David
3045	Spilman	Charles
3046	Spomer	Henry
3047	Spoon	Suzanne
3048	Spragett	Cedra
3049	Sprague	Sara
3050	Springer	Ralph
3051	Sprouls	Mark
3052	Spurlin	Timothy
3053	St john	Carol
3054	Stack	Charles
3055	Staley	Paul
3056	Stamback	Kelly
3057	Stamps	Larry
3058	Stander	Thomas
3059	Stanfield	Maggie
3060	Starck	Virginia
3061	Stark	Alexis
3062	Stark	Louise
3063	Starks	Rebekah
3064	Starks	Ruth

	Last Name	First Name
3065	StDenis	Lynn
3066	Steadman	David W
3067	Steadman	Melanee
3068	Stebbins	Stacie
3069	Steele	David
3070	Steele	Diane
3071	Steele	Michelle
3072	Steere	David
3073	Steere Jr	David T
3074	Steffy	Stephen
3075	Stegman	Bart
3076	steill	kip
3077	Steimle	David
3078	Stein	Diane
3079	Stein	M.
3080	Stein	Rob
3081	Steinleino	Marylou
3082	Steinmetz	Josh
3083	STEITZ	MIMI
3084	Stellar	Joni
3085	Stenson	Jennifer
3086	Stepan	Judith
3087	Stephen Cody	T.
3088	Stephens	Steve-Anna
3089	Stephens	Victoria
3090	Stephenson	Jill
3091	stepnicka	sara
3092	Stern	Carrie
3093	Stern	Patricia
3094	Stern-Eilers	Estelle
3095	Stevens	Barbara
3096	Stevens	Mark
3097	Stevenson	Susan
3098	Steverson	James
3099	Stewart	Gene

	Last Name	First Name
3100	Stewart	Nancy
3101	Stieber	Frank
3102	Stielow	Dennis
3103	Stiles	Msgan
3104	Stilley	Brad
3105	Stillman	John
3106	Stitt	Kirk
3107	Stitt	Linda
3108	Stock	Sandra
3109	Stockburger	Paul
3110	Stoffers	Joyce
3111	Stoll	Debora
3112	Stoll	Patricia
3113	Stone	Kim
3114	Stone	Michael
3115	Stoner	Grace
3116	Storch	David
3117	storer	timothy
3118	Stork	Jacquine
3119	Stoscup	William
3120	Stovall	Scott
3121	Stover	Charry
3122	Stowe	Gerald
3123	Strabala	Joel
3124	Strader	Linda
3125	Strand	John
3126	Strang	James
3127	Stransky	Laura
3128	Straub	Allen
3129	Strautman	Paul
3130	Strautman	Susan
3131	Strickland	James
3132	Stringham	Rachel
3133	Stromgren	Mark
3134	Stucke-Jungemann	Karen

	Last Name	First Name
3135	Stufkosky	Wayne
3136	Stuhaan	Sandy
3137	Stump	Joel
3138	Sturges	Dorothy
3139	Sturges	Jeff
3140	Stutzman	Kerry
3141	Suarez	Cristina
3142	Suarez	Karissa
3143	sudano	Kathleen
3144	Sullivan	Joe
3145	Sullwold	Eric
3146	Sumler	James
3147	Summer	Rebecca
3148	Summer PhD	Rebecca
3149	Summers	Marcia
3150	Sundari	Sheila
3151	Sundquist	Makayla
3152	Sundt	Clint
3153	Supple	John
3154	Surakus	Doreen
3155	Sutherland	James
3156	Sutton	Cynthia
3157	Sutton	Russ
3158	Swadley	Virgil
3159	Swain	Bonnie
3160	Swallow	Sarah
3161	Swan	Lynn
3162	Swanson	Vern
3163	Swartz	Deborah
3164	swartz	janie
3165	Swartz	Martha
3166	Sweeney	Karen
3167	Sweeney	Ray
3168	Sweet	Kirsten
3169	Swegle	Vern

	Last Name	First Name
3170	Swersey	Mary
3171	Swersey	Mary N.
3172	Swift	Dean
3173	Swift	Veronica
3174	Swinson	Justin
3175	Switzer	Bruce
3176	Sydell	John
3177	Sydmour	Jac
3178	Szkodzinski	Suzanne
3179	T Steere Jr	David
3180	Tackitt	Millam
3181	Tahija	Laurie
3182	Tait	Betsy
3183	Tamarack	Michael
3184	Tanner	Jeffrey
3185	Taran	Elizabeth
3186	Tarrence	Susan
3187	Tassi	Tanya
3188	Tavakolian	Joseph
3189	Taylor	Ann
3190	taylor	david
3191	Taylor	Sandra
3192	Tedesco	Terry
3193	Teliha	Joe
3194	Temple	Carol
3195	Terrazas	Francisco
3196	Terri Gilmore	Terri
3197	Terribile	Michael
3198	Teunissen	Christina
3199	Tews	Aaron
3200	Thacker	Yolanda
3201	Thalhamer	Patricia
3202	Thatcher	Tobey
3203	Thatchet	Leslie
3204	Thetford	Michael

	Last Name	First Name
3205	Theumer	Eric Von
3206	Thing	Susan
3207	THOMAS	BARRY
3208	Thomas	Eleanor
3209	Thomas	Mark
3210	Thomas	Peter
3211	Thomas	Shane
3212	Thomlinson	Del
3213	Thompson	Brian
3214	Thompson	Bruce
3215	Thompson	Bryan
3216	Thompson	Deb
3217	Thompson	Dillon
3218	Thompson	Joan
3219	Thompson	Mary
3220	Thompson	Michael
3221	Thorn	Jen
3222	Thornton	William
3223	Thrall	Richard
3224	THURSTIN	GARY
3225	Tibsherany Kris	Kris
3226	Till	Tracey
3227	Timmer	Thomas
3228	Timmins	M
3229	Timmons	Roberta
3230	Tintle	Keara
3231	Tirone	Steve
3232	Titre	Bonnie
3233	Tittle	Jean
3234	Todd	Simon
3235	Todd	Trent
3236	Todd	Walter
3237	Tolf	Edward
3238	Toller	Lisa
3239	Toma	John

	Last Name	First Name
3240	Tomizuka	Kimberly
3241	Tone	Ronald
3242	Torget	Marie
3243	Toro	Javier
3244	Torre	Felipe O.
3245	Torrey	James
3246	Torrey	Kenny
3247	Torrey	Wanda
3248	Torruella	Simone
3249	Toscano	Rose
3250	Toth	Cheryl
3251	Toth	Kathy
3252	Tovar	Laquieda
3253	Towne	Jennifer
3254	Townsend	Anne
3255	Townsend	Gary
3256	Townsend	Trent
3257	Tozer	Grant
3258	Tracy	Shonessi
3259	Trame	Jessamyn
3260	Trapp	Jaye Lynn
3261	Tremellen	Austin
3262	Trimm	Katherine
3263	Trout	Marty
3264	Trow	Brenda
3265	Trudgett	I
3266	Truebe	Sarah
3267	Trumbo	Janet
3268	Tubbs	Trisha
3269	Turcotte	David
3270	Turner	Alyssa
3271	Turner	George
3272	Turner	Kimberly
3273	Turner	LaQuenta
3274	Turner	Phyllis

	Last Name	First Name
3275	Tusset	Claudia
3276	Tyburec	Eric
3277	Umphries	Andrew
3278	UPTAIN	DEBBIE
3279	Urick	Ann
3280	Usborne	Darlene
3281	Utter	Samantha
3282	Vachon	Roger
3283	Vail	Katherine
3284	Valasakos	Diene
3285	Valdiserri	Michael
3286	Valenzuela	Chris
3287	Valenzuela	Richard
3288	Valle	Nadia
3289	Valle	Nayda
3290	Van Gundy	Jill
3291	Van Hoek	Anna
3292	Van Sant	Darcy
3293	Van Veldhuizen	John
3294	Van Veldhuizen	Mary Jane
3295	Van Wyk	Pam
3296	Vana	Cheryl
3297	Vance	Patricia
3298	VanDenzen	Elizabeth
3299	Vandzura	Matthew
3300	Vangel	Rebecca
3301	VanTassel	Tom
3302	Varga	Dolores
3303	Vargo	Gary
3304	VASSALLO	ANTHONY
3305	Vassallo	Debra
3306	Vaughan	Joseph
3307	Vaughan	Stephen
3308	Vega	Jesus
3309	Velez	Golda

	Last Name	First Name
3310	Venters	Daren
3311	Venters	Darren
3312	Ventittelli	Aubrey
3313	Veo	Debra
3314	Verge	Colleen
3315	vernalia	madeline
3316	Vernier	Donna
3317	Vesledahl	Aaron
3318	Viche	Ray
3319	Vickers	Jean
3320	Vigil	Doug
3321	Villalobos	Joyce
3322	Villaverde	Kathryn
3323	Villigan	Bruan
3324	Villodas	Abigail
3325	Vincent	Landon
3326	Vincent	Peggie Jo
3327	Vingua	Mari
3328	Vinson	Sterling
3329	Virzi	Nichelle
3330	Vivian	Bryan
3331	Vleck	Carol
3332	Vo	Stephanie
3333	Voboril	Aaron
3334	Vogel	Bryce
3335	Vogt	Richard
3336	Volkova	Lucia
3337	Vowell	Larry
3338	Vowell	Willie
3339	Wachira	Mary
3340	Wadsworth-seibel	Monica
3341	Waggoner	Fred
3342	Wagner	Judy
3343	Wagoner	Haley
3344	Wagoner	Scott

	Last Name	First Name
3345	Waken	Gene
3346	Walden	Karen
3347	Walker	Barbara
3348	Walker	Barbara M
3349	Walker	David
3350	Walker	Heather
3351	Walker	Kathalin
3352	Walker	Leslie
3353	Walker	Mark
3354	Walker	Mary
3355	Walker	Turner
3356	Walker Jr	William
3357	Wall	Teresa
3358	Wallace	Charles
3359	WALLACE	DENNIS
3360	Wallace	Kelly
3361	Wallace	Matthew
3362	Wallace	Trina
3363	Wallin	Anya
3364	Walling	Brad
3365	Walls	Laura
3366	Walsh	J
3367	Waltasti	Marilyn
3368	Walton	Laura
3369	Wands	Pat
3370	Ware	Dan
3371	Ware	Leslie
3372	Warner	Anne
3373	Warner	Melissa
3374	Warner	Steve
3375	Warnke	Jan
3376	Warnke	Merlin
3377	Warren	Barbara
3378	Warrick	Judi
3379	Washuk	Lauren

	Last Name	First Name
3380	Waters	Jennifer
3381	Watkins	Sheri
3382	Watson	Allan
3383	Watson	David
3384	Watson	John
3385	Watson	Natasha
3386	Watzek	E. Diane
3387	Waufle	David
3388	Waxman	Cory
3389	Weaklend	Danny
3390	Weant-Leavitt	Margaret
3391	weathersbee	christine
3392	Weaver	Annabelle
3393	Webb	Dan
3394	Webb	Jane
3395	Webber	Jon
3396	Webber	William
3397	Weber	Sarah
3398	Weber	Ursula
3399	Weber	William
3400	Webster	Catherine
3401	Webster	Phyllis
3402	Weeks Toni	Maureen
3403	Weger	John
3404	Wehrmeister	Judith
3405	Weigand	Edward
3406	Weinberg	Henry
3407	Weiner	Mike
3408	Weiss	Charlotte
3409	Weiss	Michael
3410	Weiss	Rick
3411	Weisser-Lee	Melinda
3412	Weistrop	Donna
3413	Welborn	Michael

	Last Name	First Name
3414	Welborn	Michael And Valerie
3415	Welborn	Valerie
3416	Welch	Anna
3417	Welch	Art
3418	Welch	Michael
3419	Wellington	Mary
3420	WELTsch	Greg
3421	Wendel	Thomas
3422	Wendel	Tom
3423	Weng	Michael
3424	Wenger	David
3425	Wenrick	Peggy
3426	WENTLAND	CAROLYN
3427	Werner	Jeremy
3428	Wertheim	Amber
3429	Wertin	John
3430	Wertin	John and Robbie
3431	Wertin	Robbie
3432	Westbrook	Kristen
3433	Westbrook	Paul
3434	Westermann	Paul
3435	Westover	Cody
3436	Westover	Kenneth
3437	Westphal	Brenna
3438	Wetzel	Glen
3439	Wheeler	Dorothy
3440	whippl	carl
3441	whipple	carl
3442	Whipple	Judith
3443	Whisman	Freda
3444	White	Angee
3445	White	Daniel
3446	White	Doris
3447	White	John

	Last Name	First Name
3448	White	Linda
3449	White	Rich
3450	White	Robert
3451	White	Thomas
3452	Whitehead	Heather
3453	Whitehouse	Judy
3454	Whiteley	Diana
3455	Whitworth	Karen
3456	Wichers	Ben
3457	Wick	Jodi
3458	Wick	Pat
3459	Wicker	Cynthia
3460	Wickliff	David
3461	Wiemer	Wolf
3462	Wiener	Wendy
3463	Wier	Mike
3464	Wier	Vicki
3465	WIESNER	MARCIA
3466	Wiewandt	Thomas
3467	Wilcher-Minick	Joan
3468	Wilcock	Jill
3469	Wildman	Bill
3470	Wildman	Farryl
3471	Wiley-Hill	Jordan
3472	Wilhelm	Lisa
3473	Wilke	Michael
3474	Wilkins	Jaci
3475	Wilkinson	Diana
3476	Wilkinson	Ted
3477	Williams	Amy
3478	Williams	Ann
3479	Williams	Brian
3480	Williams	Catherine
3481	Williams	Connor
3482	Williams	Cristina

	Last Name	First Name
3483	Williams	Gary
3484	Williams	Julie
3485	Williams	Matt
3486	Williams	Nancy
3487	Williams	Sharon
3488	Williams	Stephania
3489	Williamson	Lisa
3490	Williamson	Scott
3491	Willie	Diana
3492	Willis	Daniel
3493	Willmering	Bill
3494	Willoughby	Diana
3495	Willoughby	Stephanie
3496	Wilmes	William
3497	Wilson	Connie
3498	Wilson	Dale
3499	Wilson	David
3500	Wilson	Devin
3501	Wilson	Ivalee
3502	Wilson	Kelly
3503	Wilson	Kevin
3504	Wilson	Kim
3505	Wilson	Sue
3506	Wilson Coplen	Nedra
3507	Windsor	Shawn
3508	Windus	Donald
3509	Winftee	Lynn
3510	Winsten	Dennis
3511	Winter	PUl
3512	Winter	Roberta
3513	Winterton	Kent
3514	wirkus	john
3515	Witte	Roslynn
3516	Wittenbreder	Ernest
3517	Witzeman	Janet

	Last Name	First Name
3518	Woehl	Cynthia
3519	Woessner	Jan
3520	Wojahn	Daniel
3521	Wolf	David
3522	Wolf	Gary
3523	Wolf	Melissa
3524	Wolfe	Amy
3525	Wolfe	Iris
3526	Wolfe	Jim
3527	Wolfe	Jonathan
3528	Wolfe	Vicki & Gerry
3529	Wolff	Jennifer
3530	Wolff	Kirk
3531	Wolk	Robert
3532	Wolke	Adam
3533	Wollenberg	Margo
3534	Wollman	Nan
3535	Wolowsky	Cheryl
3536	Wolter	Elaine
3537	Wolter	Gerry
3538	Wood	Barb
3539	Wood	Barbara
3540	Wood	Helen
3541	Woods	Dana
3542	Woods	Kimberly
3543	Woodward	Anita
3544	Woodward	Anita Jim
3545	Worden	James
3546	worden	jennifer
3547	Worthen	Shammah
3548	Wortman	Shantell
3549	Wright	David
3550	Wright	Debra
3551	Wright	Donald
3552	Wright	Dorothea

	Last Name	First Name
3553	Wright	Joan
3554	Wright	Judy
3555	Wright	Kyra
3556	Wright	Roger
3557	Wright	Tereasa
3558	Wyer	Benton
3559	Wymetal	Alexandra
3560	Wynne	Judson
3561	Yamauchi	Saeko
3562	Yang	Whitney
3563	Yannuzzi	Jill
3564	Yarber	Michelle
3565	Yates	Blair
3566	YATES	CINDY
3567	Yattaw	Thomas
3568	Yaw	Don
3569	Yeargain	Peggy
3570	Yoches	David
3571	Yoder	Steve
3572	Yorke	Russ
3573	Youmans	Adele
3574	Young	Aria
3575	Young	Carolyn
3576	Young	David
3577	Young	Frank
3578	Young	Michelle
3579	Young	Phyllis
3580	Young	Richard
3581	Young	Tracy
3582	Youngstrom	Beverly
3583	Yribe	Steven
3584	Yucupicio	Peter
3585	Yuhas	Louise
3586	Yule	Kelsey
3587	Zaber	David

	Last Name	First Name
3588	Zacharias	Jane
3589	Zache	Randy
3590	Zagula	Loraine
3591	Zahra	Michael
3592	Zanetti	Maxime
3593	Zanger	Maggy
3594	Zanola	Tina
3595	Zarnoch	Joe
3596	Zaworski	Thomas
3597	Zelasko	Andrew
3598	Zelasko	Sandy
3599	Zenner	Dale
3600	Zenz	Patrice
3601	Zervis	Mike
3602	Zetocha	Barbara
3603	Ziemba	Francesca
3604	Ziems	Stacy
3605	Zubick	Jamie
3606	Zufelt	Sean
3607	Zukerman	David
3608		Cinda