COUNTY ADMINISTRATOR'S OFFICE

PIMA COUNTY GOVERNMENTAL CENTER
130 W. CONGRESS, TUCSON, AZ 85701-1317
(520) 740-8661 FAX (520) 740-8171

C. H. HUCKELBERRY
County Administrator

October 6, 2006

Jamie Sturgess, Vice President
Projects and Environment
Augusta Resource Corporation
4500 Cherry Creek South Drive, Suite 1040
Denver, Colorado 80246

Re: **Rosemont Mine July 31, 2006 Plan of Operations**

Dear Mr. Sturgess:

Attached is a memorandum to the Pima County Board of Supervisors concerning your July 31, 2006 plan of operations for Rosemont Mine. As you are aware, the Board discussed this plan at their October 3, 2006 meeting, since a resolution to oppose the mine was on the agenda. The item was continued to the November 14, 2006 Board meeting to provide the Board time to review staff comments, and to give you time to respond to these comments.

We understand that the County is not the major permitting agency for this plan. However, the County has become a leader on conservation and land planning issues via its nationally recognized Sonoran Desert Conservation Plan. The Forest Service entered into a Memorandum of Understanding in 2000 to pursue cooperative planning with the County regarding the Sonoran Desert Conservation Plan. It is in that spirit that I have asked the Forest Service to support the five performance criteria I have spoken to you about previously, the details of which are included in the attached memorandum. These include adherence to the County's Conservation Lands System, no impacts to Cienega Basin and Cienega Creek, concurrent reclamation, visual impacts, and the establishment of an environmental enhancement fund. I am still unable to tell if and how you will meet these. It would be helpful for you to address each as concisely as possible, based on the information you have available at this stage of the project, prior to the Board's November 14, 2006 meeting.

I applaud your effort to incorporate environmentally sound measures in your mining plan. This is unusual in the mining industry and deserves recognition. That said, the County needs to see more details regarding environmental impacts and mitigation, as delineated in the attached memorandum. The County also needs to know what assurances will be put in place to ensure that the necessary mitigation will in fact occur.

Thank you for your continued cooperation.

Sincerely,

C.H. Huckelberry
County Administrator

CHH/jj

Attachment

c: The Honorable Chairman and Members, Pima County Board of Supervisors
Nicole Fyffe, Executive Assistant to the County Administrator

MEMORANDUM

Date: October 5, 2006

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator

Re: **Rosemont Mining Plan of Operations Dated July 31, 2006**

Background

Augusta Resource Corporation submitted a mining plan of operations to the United States Forest Service on July 31, 2006 for the mining of the Rosemont Ranch property. The property is located in the Santa Rita Mountains. According to this plan of operations, the total footprint of the project is estimated at 4,000 acres: 840 acres owned in fee by Augusta; 3,135 acres on federal lands (unpatented mining claims) managed by the Coronado National Forest; and 20 acres on State Trust land. It should be noted that the Forest Service has completed their initial review of the July 31, 2006 plan of operations and has notified Augusta that the plan is insufficient and in need of more detail. Therefore, the Forest Service will take no further action until a revised plan is submitted. This report is based on the July 31, 2006 plan. The County will provide comments on additional plans as they are submitted.

At the September 5, 2006 Board meeting, the Board directed staff to provide initial comments on the plan of operations within 30 days. Initial comments from various departments are attached. The comments are also summarized below, along with information on the history of the property, the Forest Service's permitting process, and the five performance criteria that I believe any mining operation in this location Augusta should meet.

It is important to state up front that the major permitting authority for this mining project is the U.S. Forest Service, NOT the County. The only permits required by the County and the Flood Control District include an air quality permit and floodplain use permits for mine features, excluding tailing dams and waste disposal areas as exempted by State law.

History of the Property

Land exchanges for the purpose of facilitating mining on this property were pursued to different extents in 1970 and 1997. In 1997, it was ASARCO that proposed a land exchange in this location to facilitate development of a copper mine. ASARCO held unpatented mining claims, as Augusta does now, but ASARCO sought to bring further validity to their right to use the land for mining via a land exchange. In May of 1997, the Board passed a resolution

in opposition to the land exchange. The Santa Cruz Board and Tucson City Council passed similar resolutions. In early 1998, ASARCO dropped the effort to pursue the land exchange and develop the mine.

In the summer of 2004, the property was sold to Triangle Ventures, L.L.C., who in turn offered the property to the County in December 2004. The Conservation Acquisition Commission discussed the offer at their February 10, 2005 meeting, and took no action for a variety of reasons. A major obstacle to acquiring this property was that it was not one of the properties eligible for acquisition under the 2004 bond program, and would therefore have required an amendment to the program.

Forest Service Permitting Process

Although Augusta is anticipating the need for permits from several federal, state, and local agencies, the major permitting authority for this project will be the U.S. Forest Service with regard to the mining plan of operations. According to Beverly Everson, Forest Service Geologist with the Coronado National Forest, the Forest Service has 90 days to review a plan of operations. The Forest Service has completed its review of the July 31, 2006 plan, and has notified Augusta that the plan is insufficient and in need of more detail.

Assuming Augusta provides the Forest Service with sufficient information for them to accept a future plan of operations, the next step would be to begin the National Environmental Policy Act (NEPA) process. The NEPA requires that federal agencies consider environmental impacts when taking major actions such as accepting a mining plan of operations. This process requires public input. Since this is a major Federal action that will have a significant effect on the environment, it is likely that it will be necessary to develop an Environmental Impact Statement (EIS) as part of the NEPA process. The first step in this process would be scoping, which will include the notification and solicitation of comments from anyone who expressed interest. This would be Pima County's formal opportunity to comment to the Forest Service. This is also when the Forest Service would consult with other agencies such as the U.S. Fish and Wildlife Service. A draft EIS and final EIS would then be made available for interested parties to comment on, respectively. After this process is complete, the Forest Service would then file a record of decision.

The County is consulting with a mineral rights attorney retained by the County Attorney's Office. According to this attorney, it maybe worthwhile to request a validity check on the unpatented mining claims. If Augusta does have valid claims then they may have the salutatory right to proceed. The Forest Service process can impact the methods of operations and the mitigation, which in turn could have an impact on whether the operations remain profitable and viable. There is also a question as to whether storing tailings on potentially valuable unpatented mining claims for the sole purpose of receiving profit from a mining pit on adjacent private lands is a practice the Forest Service can disallow. A question has also come up regarding what would happen to Augusta's mitigation commitments if the property were sold to another mining entity. According to this attorney, plans of operations can be sold to other entities. If this were to occur, then the other mining entity would be subject to the same mitigation requirements.

In November 2000, the Coronado National Forest Supervisor and the Chair of the County Board of Supervisors executed a memorandum of understanding (MOU), attached, for cooperative planning related to the Sonoran Desert Conservation Plan (SDCP). The Forest Service has stated that they will be seeking constructive comments that can they can put to use when evaluating the environmental impacts during the NEPA process. There are five performance criteria outlined below that I believe Augusta, or any other mining operation on this site, should have to meet before being permitted to pursue operations. In the spirit of cooperation, I will ask the Forest Service to support these five performance criteria when evaluating Augusta's plan of operations and when negotiating mitigation for the project. Additional input will be provided to the Forest Service regarding specific environmental impacts that may be of concern.

Required County Permits

Based on many exemptions in state law for mining activities, the regulatory powers of the County and the County's Regional Flood Control District are restricted. That said, the Pima County Department of Environmental Quality will require an air quality permit, and will regulate the proposed on-site public water system and the generation of hazardous waste. The Flood Control District will require floodplain use permits for mining features that impact floodplains, with the exception of tailing dams and waste disposal areas, which are the two features that are specifically exempt from the Flood Control District's oversight. It is unclear in the plan of operations on whether Augusta will be requesting use of Pima County right of way for electric and/or water pipes.

Five Performance Criteria

Although Pima County will not be the major permitting agency for this project, we will be providing constructive comments at each step of the process to the various permitting agencies. I have repeatedly outlined the five most important performance criteria that Augusta, or any other mining operation in this area, must meet:

1. Adherence to the County's Conservation Lands System (CLS) Guidelines - Augusta has stated that they will meet the goals of the SDCP. The County's CLS is an integral part in the implementation of the SDCP. If this were a residential development, as opposed to a mine, the County would evaluate compliance with the CLS guidelines based on the acres impacted in each of the CLS categories and the corresponding mitigation ratios. Based on the areas of disturbance mapped in the July 31, 2006 plan of operations, excluding the roads, the following mitigation would apply (see CLS map attached).

CLS Category	Acres Impacted	Mitigation Ratio	Acres of Mitigation
Biological Core Management Areas	219	4:1	876
Multiple Use Management Areas	2,996	2:1	5,992
Important Riparian Areas	502	4:1	2,008
Total Mitigation	**3,717**		**8,876**

For instance, for one acre of impact to Multiple Use Management Areas, four acres of Multiple Use lands or a more protective category of the CLS should be conserved, on or off site. The footprint of Augusta's proposed mine is significantly smaller than the mine previously proposed by ASARCO. Augusta has sited the project such that their impacts to Biological Core Management Areas will be considerably less than impacts under ASARCO's plan.

That said, it is evident that Augusta does not clearly understand the Multiple Use designation as it is applied in the CLS. The County's Multi-Species Conservation Plan (MSCP), defines Multiple Use Management Areas.

> "Land use and management goals within these areas shall focus on balancing land uses with conservation, restoration, and enhancement of native biological communities. Land uses appropriate for these areas must facilitate the movement of native fauna and pollination of native flora across and through the landscape, maximize the retention of on-site conservation values, and promote landscape integrity."

Uses of the property for mining, ranching, and recreation, at the expense of the environment and at the expense of migratory corridors, do not meet this balance.

As with residential development impacts to the CLS, mitigation must occur up front. Setting aside over 2,000 acres for conservation in perpetuity, as has been stated by Augusta, is a start. To actually meet the goals of the SDCP, an additional 6,800 acres should also be conserved in perpetuity. The Forest Service needs to ensure that this mitigation occurs, regardless of the success of the mining projects. In other words, if the project fell apart after impacting significant amounts of Forest Service land, it would be unacceptable for mitigation to never occur.

2. <u>No Impact to Water in the Cienega Basin and Cienega Creek</u> - Groundwater pumping at the mine site itself or east of the project area would negatively impact the Cienega Basin, Cienega Creek and its tributaries, and the plants, animals, and people that rely upon water from this basin. The plan of operations states that the preferred location for the groundwater wells to serve the mine would be in the upper Santa Cruz Basin west of the Santa Rita Mountains along Santa Rita Road. The water would then be replenished in the same basin via a CAP secured allocation to be recharged at the Pima Mine Road recharge facility. Therefore, it does not appear that groundwater will be pumped from the Cienega Basin. What is of great concern, however, are impacts from reduced flows along Davidson Canyon to the Cienega Creek. Construction of dams and tailing piles could diminish high quality and quality flows to Davidson Canyon, which would impact both water quality and quantity along Cienega Creek - a Unique Water of the State. The plan of operations does not address this impact or how it will be mitigated. Furthermore, under the reclamation portion of the plan, a dam at the eastern edge of Barrel Canyon is shown to remain even after mine closure, causing reduced flows indefinitely.

3. Concurrent Reclamation - Throughout Pima County there is evidence of the scars of mining projects that failed to provide meaningful reclamation, or sometimes any reclamation at all. It is typical of the mining industry to continue to tout a mine facility as active for years and years, so that the reclamation requirement does not begin. This is absolutely unacceptable and is a major flaw in present permitted mining operations. Reclamation needs to occur concurrently, commitments need to be enforceable, and funds need to be committed up front. The plan of operations states that reclamation will begin in year one, which is a positive step in the right direction.

4. Visual Impacts - Sonoita Highway is designated as a scenic highway. Every effort needs to be made to make sure the mining pit and facilities are not visible from the highway. Furthermore, the tailings should be contoured and landscaped to match the surrounding native landscape and land forms. Tailings such as those visible from Interstate 19 through Green Valley are unacceptable.

5. Environmental Enhancement Endowment - In approving the Starr Pass resort, the County was able to institute an environmental enhancement program whereby Starr Pass contributes funding that is used to expand, manage, and maintain Tucson Mountain Park. A mine in this location should contribute to a similar fund, as part of the mitigation for the various negative impacts the mine will create. The plan of operations does state that an endowment will be set up with annual contributions beginning after operations begin, and will total a minimum of $21 million. Considering the costs to purchase mitigation land, $21 million will not be enough. There is also a concern about the financial solvency of the operations. Much of the funds to secure mitigation land and to establish the endowment should be provided up front or deposited in a pay-as-you-go account reserved exclusively for environmental enhancement.

In addition to these five performance criteria, and in light of the public health issues experienced as a result of the mines in Green Valley, air and water quality will continue to be of utmost importance. Augusta's plan of operations states that dry tailings will be used to cut the water needs in half. It is great that they will use less water. However, the use of dry tailings should not be permitted to jeopardize air quality.

The Board also brought up a concern regarding the impacts of light produced at night from the mine on dark skies and the astronomy industry in the southwest. The plan of operations states that an analysis of Pima County's lighting codes has been conducted and that the mine will meet or exceed these requirements. Per my memorandum to the Board on September 27, 2006, forwarding a final report from the International Dark-Sky Association, I have asked Development Services to review the County's existing light codes and determine if they need updating. Any updates would be sent to Augusta.

Limited County Authority Over Mining Activities

As indicated during the October 3, 2006 discussion on the Augusta plan of operations related to potential Rosemont Mining activity, the County's authority over mining activities is quite

limited, if almost non-existent. The Board may wish to consider adding to any resolution related to this proposal a request to increase or improve County regulatory authority over mining activities. These actions should request:

A) Congressional Action to Reform the 1872 Federal Mining Law - This law has remained fundamentally unchanged for over 100 years, and governs mining activity and mineral exploration on federal lands that have not been withdrawn from mining or mineral exploration. The proposed Rosemont Mining operation is in such a location. Hence, the Board could petition the Arizona Congressional Delegation and in particular the Congressional representatives of Southern Arizona to sponsor federal mining reform legislation. While mining activities and mineral exploration are permissible on federal lands, the federal National Environmental Policy Act requires significant due process and public hearing disclosures of the environmental impacts of same and requires that these impacts be given appropriate and due consideration when considering federal actions such as granting a permit to mine economically viable minerals on federal lands.

B) Reform State Trust Mineral Leasing - These same due process and disclosure and public review processes do not exist for mining on State Trust land. Currently within the Cienega Basin litigation has been filed by private mining interests, specifically California Portland to compel the State Land Commissioner to issue a mineral exploitation lease on State Trust land. None of the detailed studies and environmental impacts, disclosures or mitigation requirements that are traditional and typical on federal lands subject to mining exist on State Trust lands. Hence the Board should also petition the State Legislature to enact more stringent rules and regulations for the exploitation of minerals on State Trust land such that the value of State Trust land is not diminished upon mineral extraction or exploitation along with full environmental mitigation and reclamation.

C) County Authority on Private Land - Finally, the County regulates a variety of land uses on private lands, however, the Legislature has seen fit to exclude mining on private lands for many local government regulations, particularly when such lands are used for certain mining practices such as sand and gravel. Hence, the Board could also request that the Arizona Legislature repeal or modify any state laws that would restrict or prohibit local governments from regulating mining activity.

In reviewing these descriptions of County authority over mining activities, it should be clear that the County, unfortunately, has little if any regulatory control or policy influence over mining activities on either federal or State Trust lands, and has essentially been precluded from such authority over private lands. These are major deficiencies in federal and state public policy that can and should be corrected.

Summary of Staff Review of July 31, 2006 Plan of Operations

Overall, the various departments that were asked to comment stated that more details are needed in order to better assess the impact of the proposed project.

Water: The plan of operations states that the preferred location for the groundwater wells to serve the mine would be in the upper Santa Cruz Basin west of the Santa Rita Mountains along Santa Rita Road. The water would then be replenished in the same basin via a CAP secured allocation to be recharged at the Pima Mine Road recharge facility. However, the plan of operations lacks information on potential hydrological impacts of these wells. Extensive modeling should be required to assess these impacts. Furthermore, with regard to the secured CAP water allocation, the plan of operations does not state what commitments Augusta can make to ensure that recharge will occur and that the water will not be sold to another potential user at a later date. Another major impact that is not addressed in the plan of operations is that dams and tailings will fill in Barrel and Scholefield Canyons, decreasing flows to Davidson Canyon and Cienega Creek. This would negatively impact County preserves, plants and animals that rely on this water for survival, including human users of water from the Cienega Basin. Either in the next plan of operations, or during the NEPA process, this issue must be addressed. On a positive note, the use of dry tailings would cut the mine's water use in half, and a commitment to recharge CAP water is above and beyond what Arizona law requires.

Mitigation/Reclamation/Endowment: Questions regarding the financial solvency of the company and the project necessitate up front and enforceable commitments.

Cultural Resources: The analysis in the plan of operations is woefully inadequate. There is no certainty provided on the preservation of the Helvetia Townsite, a Sonoran Desert Conservation Plan Priority Cultural Resources site identified in the 2004 bond program for acquisition.

Transportation: The number of haul trucks hauling copper cathodes, chemicals and fuel, needs to be disclosed. Also, a contingency plan for managing potential chemical or fuel spills is necessary.

Environmental Quality: The Pima County Department of Environmental Quality outlined several environmental quality regulations that would apply to this project.

Also attached are a series of unanswered questions from a Mr. Roger Featherstone of Earthworks. Earthworks is a non-profit organization whose mission is to protect the environment and communities from irresponsible mining activities.

Summary and Recommendation

The Forest Service is the major permitting body regarding this mine proposal, not the County. Both County staff and the Forest Service agree that more details are needed before the true impacts of this project can be evaluated. The County's job will be to provide constructive input on environmental impacts during the federal NEPA process, and during other agencies permitting processes.

This memorandum and staff comments will be forwarded to Augusta in order to give Augusta the opportunity to provide additional information. I still believe that Augusta should be given an adequate opportunity to respond to these comments before the Board considers a possible resolution against the mining project. The County's comments during the Forest Service's EIS process will be significantly more credible if a comprehensive and deliberate review process is followed and the temptation to say no based on insufficient information is avoided.

This memorandum, staff comments, and audio/video of the October 3 Board meeting proceedings, and the names and written comments of individuals from the meeting regarding this issue will be forwarded to the Forest Service Supervisor. Staff will continue to comment on each draft of the plan of operations, and on any other permits that Augusta may seek. In addition, in discussions with Augusta and the other permitting agencies, we will continue to reiterate that a plan of operations that does not meet the five performance criteria listed previously is unacceptable.

CHH/jj

Attachments:

Memorandum of Understanding Between the County and the Forest Service
CLS Map
Comments from the Regional Flood Control District
Comments from the Cultural Resources Office
Comments from the Department of Environmental Quality
Comments from the Department of Transportation Regarding Bridges
Comments from the Department of Transportation Regarding Haul Trucks
Comments from the Natural Resources, Parks and Recreation Department
Comments from Development Services
Comments from Roger Featherstone of Earthworks

c: Nicole Fyffe, Executive Assistant to the County Administrator

FS Agreement No. 01-MU-110305-60-009
Cooperator Agreement No. _____
11/27/00

MEMORANDUM OF UNDERSTANDING
between
USDA FOREST SERVICE, SOUTHWESTERN REGION, CORONADO NATIONAL FOREST
and the
PIMA COUNTY GOVERNMENT

This **MEMORANDUM OF UNDERSTANDING** is hereby entered into by and between the USDA Forest Service, Southwestern Region, Coronado National Forest, hereinafter referred to as the Forest Service, and the Pima County Government, hereinafter referred to as the County.

A. PURPOSE:

This agreement is written to create a framework for cooperative land management planning between the Forest Service and County, including sharing of data and coordination of goals and objectives among the Forest Land Management Plan and Sonoran Desert Conservation Plan.

B. STATEMENT OF MUTUAL BENEFIT AND INTERESTS:

Whereas the Forest Service and Pima County are responsible for the management of natural and cultural resources that are distributed without regard to political jurisdiction, and

Whereas the Forest Service and County serve many of the same publics, and

Whereas resource management and public service are facilitated by coordinated, regional and cross-jurisdictional approaches;

The Forest Service and County find that it is mutually beneficial to share information on the location of natural and cultural resources, their management requirements, and the interests and concerns of the public, and to develop and implement coordinated plans for resource management.

C. FOREST SERVICE SHALL:

1. Compile data concerning wildlife, vegetation, riparian habitats, ranching and cultural resources on National Forest System lands within the County.
2. Compile information on Forest Land Management Plan standards and guidelines for National Forest System lands within Pima County.
3. Provide the compiled information to the County in the form of management summaries and other documents.
4. Provide staff to participate on Technical Teams, and assist the County in analyzing information provided by the Forest Service, and to identify opportunities for coordinated conservation planning and implementation respecting ranches, cultural and historic resources, riparian areas, critical and sensitive habitat and biological corridors.
5. Implement the existing Forest Land Management Plan, and prepare and implement a revised plan (if authorized by Congress), in a manner that responds to information provided by the County, and that coordinates opportunities for conservation of natural and cultural resources.
6. Standardize and integrate regulatory procedures and requirements to ensure inter-jurisdictional consistency, to the extent possible and consistent with law.

D. THE COUNTY SHALL:

1. Compile data concerning wildlife, vegetation, riparian habitats, ranching and cultural resources on non-Forest Service lands within the County

2. Include the Forest Service as a participant in the Government Working Group and appropriate Science Technical Teams engaged in development of the Sonoran Desert Conservation Plan.
3. Provide staff to assist the Forest Service in analyzing information provided by the County, and to identify opportunities for coordinated conservation planning and implementation respecting ranches, cultural and historic resources, riparian areas, critical and sensitive habitat and biological corridors.
4. Prepare and implement a Sonoran Desert Conservation Plan in a manner that responds to information provided by the Forest Service, and that coordinates opportunities for conservation of natural and cultural resources.
5. Standardize and integrate regulatory procedures and requirements to ensure inter-jurisdictional consistency, to the extent possible and consistent with law.

E. IT IS MUTUALLY AGREED AND UNDERSTOOD BY ALL PARTIES THAT:

1. TERMINATION. Either party, in writing, may terminate the instrument in whole, or in part, at any time before the date of expiration.

2. PARTICIPATION IN SIMILAR ACTIVITIES. This instrument in no way restricts the Forest Service or the Cooperator(s) from participating in similar activities with other public or private agencies, organizations, and individuals.

3. PRINCIPAL CONTACTS. The principal contacts for this instrument are:

Forest Service Project Contact
John McGee
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Phone: (520_670-4552
FAX: (520)-670-4567
E-Mail: jmcgee@fs.fed.us

Cooperator Project Contact
C. H. Huckelberry
Pima County Administrator
130 Congress, 10th Floor
Tucson, AZ 85701

Phone: (520)-740-8661
FAX: (520)-740-8171
E-Mail

Forest Service Administrative Contact
Jerry Conner
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Phone: (520)-670-4527
FAX: (520)-670-4567
E-Mail: jconner@fs.fed.us

Cooperator Administrative Contact
Maeveen Behan
Pima County
130 W. Congress, 10th Floor
Tucson, AZ 85701

Phone: (520)-740-8162
FAX: (520)-740-8171
E-Mail:
mbehan@exchange.pima.co.az.us

4. NON-FUND OBLIGATING DOCUMENT. This instrument is neither a fiscal nor a funds obligating document. Any endeavor involving reimbursement, contribution of funds, or transfer of anything of value between the parties to this instrument will be handled in accordance with applicable laws, regulations, and procedures including those for government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This instrument does not provide such authority. Specifically, this instrument does not establish authority for noncompetitive award to the Cooperator of any contract or other agreement. Any

contract or agreements for training or other services must fully comply with all applicable requirements for competition.

5. RESTRICTION TO DELEGATES. Pursuant to Section 22, Title 41, United States Code, no member of, or Delegate to, Congress shall be admitted to any share or part of this instrument, or any benefits that may arise therefrom.

6. MODIFICATION. Changes within the scope of this instrument shall be made by the issuance of a bilaterally executed modification.

7. COMPLETION DATE. This instrument is executed as of the last date shown below and expires on September 30, 2002 at which time it is subject to review and renewal, or expiration.

THE PARTIES HERETO have executed this instrument.

PIMA COUNTY GOVERNMENT
BOARD OF SUPERVISORS

SHARON BRONSON, CHAIR — DATE
BOARD OF SUPERVISORS

C. H. HUCKELBERRY — DATE
COUNTY ADMINISTRATOR

11/30/00

USDA FOREST SERVICE
SOUTHWESTERN REGION
CORONADO NATIONAL FOREST

John M. McGee 11.27.00

JOHN M. McGEE — DATE
FOREST SUPERVISOR

The authority and format of this instrument has been reviewed and approved for signature.

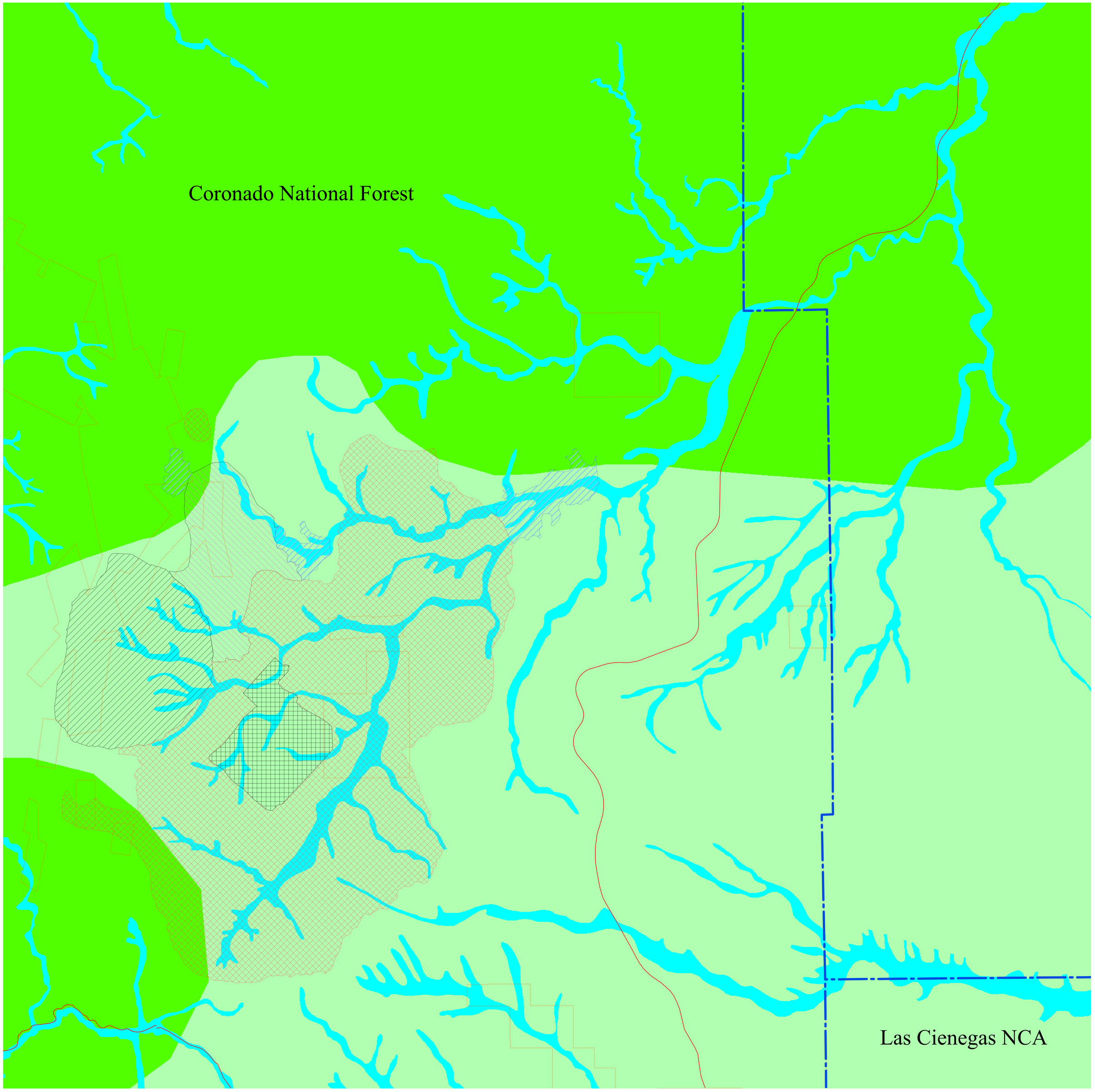
K. Richter 11/30/00

PIMA COUNTY ATTORNEY — DATE

Carmen Melendez 11-27-00

CARMEN MELENDEZ — DATE
FS Agreements Coordinator

Rosemont Mine and the Conservation Lands System



Roads

Administrative Boundaries

Private Inholdings

Conservation Lands System

Important Riparian Areas

Biological Core Management Areas

Multiple Use Management Areas

Rosemont Mine

Leach Pad
Important Riparian Areas - 32 Acres
Multiple Use Areas - 183 Acres

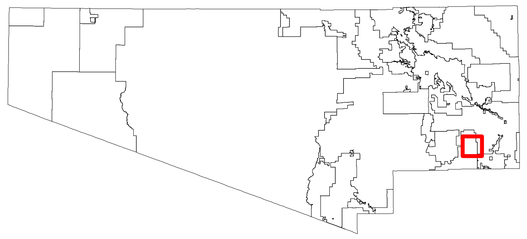
Pit
Important Riparian Areas - 50 Acres
Multiple Use Areas - 465 Acres

Ponds
Important Riparian Areas - 51 Acres
Biological Core Areas - 25 Acres
Multiple Use Areas - 72 Acres

Tailings & Waste Rock
Important Riparian Areas - 347 Acres
Biological Core Areas - 177
Multiple Use Areas - 2,028 Acres

Facilities & Plants
Important Riparian Areas - 22 Acres
Biological Core Areas - 17
Multiple Use Areas - 248 Acres

Pima County Index Map



Index Map Scale 1:1,500,000

The information depicted on this display is the result of digital analyses performed on a variety of databases provided and maintained by several governmental agencies. The accuracy of the information presented is limited to the collective accuracy of these databases on the date of the analysis. The Pima County Department of Transportation Geographic Information Services Division makes no claims regarding the accuracy of the information depicted herein.

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Scale 1:12,000

PIMA COUNTY DOT Geographic Information Services

Pima County Geographic Information Services
201 North Stone Avenue - 9th Floor
Tucson, Arizona 85701-1207
(520)740-6670 - FAX:(520)798-3429
http://www.dot.pima.gov

THE SEAL OF PIMA COUNTY ARIZONA

/pygmyowl3/projects/nfyffe/cmo0067/mxds/rosemont_cls2.mxd jr

September 28 2006

Pima County Regional
FLOOD CONTROL
DISTRICT

MEMORANDUM
Water Resources
Regional Flood Control District

DATE: August 28, 2006

TO: Nicole Fyffe
Executive Assistant to County Administrator

FROM: Julia Fonseca
Environmental Planning Manager

SUBJECT: Rosemont Project Plan of Operations

I reviewed the Westland Resources Plan of Operations Report dated July 31, 2006 concerning the Rosemont Mine proposed by Augusta Resource Corporation. The report is intended to provide a basis for the Environmental Impact Statement to be developed for the Forest Service pursuant to the National Environmental Policy Act. The following comments are prepared in response to your memorandum to staff dated August 16, 2006.

In the 1970s and 1990s, the Rosemont Ranch in the northern Santa Rita Mountains was proposed for copper mining (Figure 1). The 1990s proposal was opposed by local jurisdictions, including the City of Tucson, Pima County (see Board resolution in Attachment 1), and Santa Cruz County. The primary concerns were related to the loss of access to public land, the resulting stress on remaining public land in the area, the loss of recreational opportunities for residents and visitors, the potential negative impacts on the region's tourism-based economy, the potential harm to wildlife and water sources, and the negative impact on the overall quality of life in Southern Arizona. These concerns apply to the Augusta proposal as well.

The current mining proposal consists of the following features:

- An open pit (505 acres);
- Tailings and rock disposal (2,540 acres);
- Process pond and dam;
- 4 growth media (topsoil) storage areas;
- Lined freshwater pond (3 days supply) and dam;
- 60 million ton leach pad (220 acres);
- Lined contingency pond;
- Stormwater pond and dam;
- Administration buildings, laboratory, maintenance and vehicle shop, mill (290 acres);
- New access road and utility corridor (295 acres); and
- Crusher and conveyor belts.

The total footprint of the mine is estimated to be 3,985 acres, of which 3,155 acres would be located on Coronado National Forest in the Santa Rita Mountains. Figure 1 shows the location of patented mining claims and other fee-owned lands (pink). None of the actual footprint of the mine, aside from the utility corridors, would be located on the west side of the Santa Rita Mountains.

Unlike the 1990's ASARCO proposal, Augusta's plan of operation to the Forest Service does not include acquiring land elsewhere for preservation in exchange for obtaining clear title to mine on National Forest

land. This proposal does not include land commitments elsewhere to offset the acreage disturbed, however nothing precludes such.

The mine will excavate ore and dump waste rock upon limestone outcrops, oak woodland, grassland, mesquite forests, springs and other features identified for conservation in the Sonoran Desert Conservation Plan. The mine and its utilities will fragment the biological core of the Sonoran Desert Conservation Plan reserve system within the Santa Rita Mountains. The mine will destroy important riparian areas along Barrel and Sholefield Canyons by filling their valleys with tailings and by flooding the remnants.

The open pit and tailings will also impair ecosystem functions on the Davidson Canyon downstream (Figure 2). Barrel Canyon.is the headwaters of Davidson Canyon in the Santa Rita Mountains. As a result of diversions, dams and tailings piles, Barrel and Sholefield Canyons will no longer contribute to Davidson. Dams and channels will intercept snowmelt and stormwater which would otherwise flow toward Davidson Canyon. The tailings themselves will be designed to inhibit percolation and runoff, so not only will the habitat be destroyed, but the watershed functions will cease. The open pit will create a hydrologic sink, which will change the direction of groundwater flow in the area of the pit.

All runoff and sediment from the 100-year, 24-hour storm on Barrel and Sholefield Canyons will be diverted by dams. For a period of at least 16 years, the ecosystems and residents of the Davidson Canyon watershed will experience much diminished flows, a man-made drought. PAG groundwater monitoring indicates that water levels and streamflow along Cienega Creek and Davidson Canyon have declined due in part to the current drought. Dams and groundwater pumping in the Davidson Canyon watershed could further limit the source of downstream surface waters, including Davidson Canyon Creek and Cienega Creek, and the groundwater available to nearby private residents.

Dry stacking the tailings requires the removal of water from the tailings before it is placed on the pile. The water removed from the tailings will be laden with copper and other metals. This water will be recycled on site, and stored in reservoirs totaling approximately 125 acres. There is no commitment to remove the stormwater dam.

After the mine is done, the corporation will leave behind waste, subsurface pollution and probably one large dam. If the dam breaks, Davidson Canyon and the Sonoita Highway below the facility may experience catastrophic flooding. Surface water, ground water and sediments may be contaminated with copper and other metals. Relatively small quantities of dissolved copper are toxic to plants and animals.

At present, Davidson Canyon underflow provides as much as 20 percent of the water to Cienega Creek near the Marsh Station Road Bridge. This water is of a higher quality than Cienega Creek. It is derived from higher elevation rainfall in the Santa Rita Mountains and it has not dissolved a lot of salts along the way. As a result of the mining, this high quality water source will be diverted from Cienega Creek.

Cienega Creek is currently designated as a Unique Water by the Arizona Department of Environmental Quality. Davidson Canyon has been nominated by Pima County for the same designation as part of the triennial review. A Unique Water designation imposes a duty upon ADEQ to not issue permits which would impair water quality.

One difference between the 1970's mine proposal and the current proposal are the "environmental highlights" on page 4. Augusta's promise to revegetate the perimeter berm is a laudable effort to reduce visual blight. It is similar in concept but larger in scale than the pecan orchards that grace the gravel pit along Interstate 10, and undoubtedly more ecologically significant than the oleander hedge at Arizona Portland Cement. Augusta has also proposed to confine tailings to the Barrel and Sholefield drainages. Again, it does focus the damage on just two watersheds, as opposed to three or four, but the total acreage of the mine tailings is almost identical to the 1977 proposal.

Another difference is that Augusta's dry tailings operations would reduce the total water requirement by half from the previous mining proposals. Augusta has voluntarily entered into contracts for storage of 50,000 acre-feet (af) of CAP water at Pima Mine Road, in the Upper Santa Cruz subbasin of the Tucson Active Management Area (TAMA). Arizona does not require mines to offset their water use.

The intent of the CAP water storage is ostensibly to offset water use on a regional scale. However, no there are no commitments regarding the fate of the stored water. The stored water could be sold later to entities that *are* required to offset groundwater pumping in the TAMA. In that case, the mine's water usage would not be offset, but an expected use (some other development) would be. Can Augusta ensure that the CAP stored at the site will be a net gain of CAP to the TAMA? If not, at least the mine would be making a smart investment with great resale value.

The mine does not propose to use CAP directly. The mine is in a completely different groundwater basin from where the recharge would occur. The aquifers around the mine are primarily in bedrock fractures which may link to springs in the area. Almost no information is provided on the location of extraction wells, the amount of groundwater pumping at the mine itself, or the groundwater hydrology, except to say that wells may be located near Santa Rita Road, in the Santa Cruz Basin. Arizona state law requires the state to issue mineral extraction well permits, regardless of location or impact. Several hydrological reports are referenced, but these have not been made available to the public. Total water usage at the mine would be be 5,000 af/yr for 16 years, or at least 80,000 af.

In conclusion, the proposed mine would degrade the biological and water resource values of the existing and proposed reserves located downstream: Cienega Creek Natural Preserve, Bar V Ranch, and the adjoining state lands which the County has targeted for acquisition under the 2004 bond program. This meets the bar for the Board's opposition stated in its 2005 resolution (Attachment 2).

With regard to the Regional Flood Control District's jurisdiction, Arizona Revised Statutes 48-3613 provides that

..... a person shall not engage in any development which will divert, retard or obstruct the flow of waters in any watercourse without securing written authorization from the board of the district in which the watercourse is located. Where the watercourse is a delineated floodplain no development shall take place in the floodplain without written authorization from the board of the district in which the floodplain is located.

B. Written authorization is not required for nor shall the board prohibit:
3. Construction of tailing dams and waste disposal areas used in connection with mining and metallurgical operations.
C. Before any construction authorized by subsection B of this section may begin, the person must submit plans for the construction to the board for review and comment.

Therefore, features placed into floodplains and diverting floodwaters, except for tailings and waste disposal areas, remain subject to floodplain use permits from the Pima County Regional Flood Control District, if they are on private land. The District does not regulate federal land, so in effect our jurisdiction may be limited to the freshwater storage dam, and certain road and pipeline crossings. We can, however, comment.

Pima County is the owner of surface water rights associated with the Bar V Ranch livestock operations, which are continuing under a management agreement with the previous owner. The enjoyment of water claims 36-62096 and right 36-62120, located along Davidson Canyon some 10 miles below the mine in T17S, R17E, Sections 6 and 7, will be impaired by the upstream dams. The Regional Flood Control District also holds various in-stream water rights on Cienega Creek.

It is my belief, based on this plan of operation and the preceding proposals in the 1970's and the 1990's that the mine cannot proceed without access to the federal land. So far as I know, the federal government has not

checked the validity of the unpatented mining claims on Forest lands (Figure 2). This is a key issue, given that no land exchange is proposed. NEPA requires disclosure of impacts to the environment and society, but it does not compel the Forest Service to approve or deny access to federal lands. The Forest Supervisor may deny the request.

Pima County should undertake the following activities:

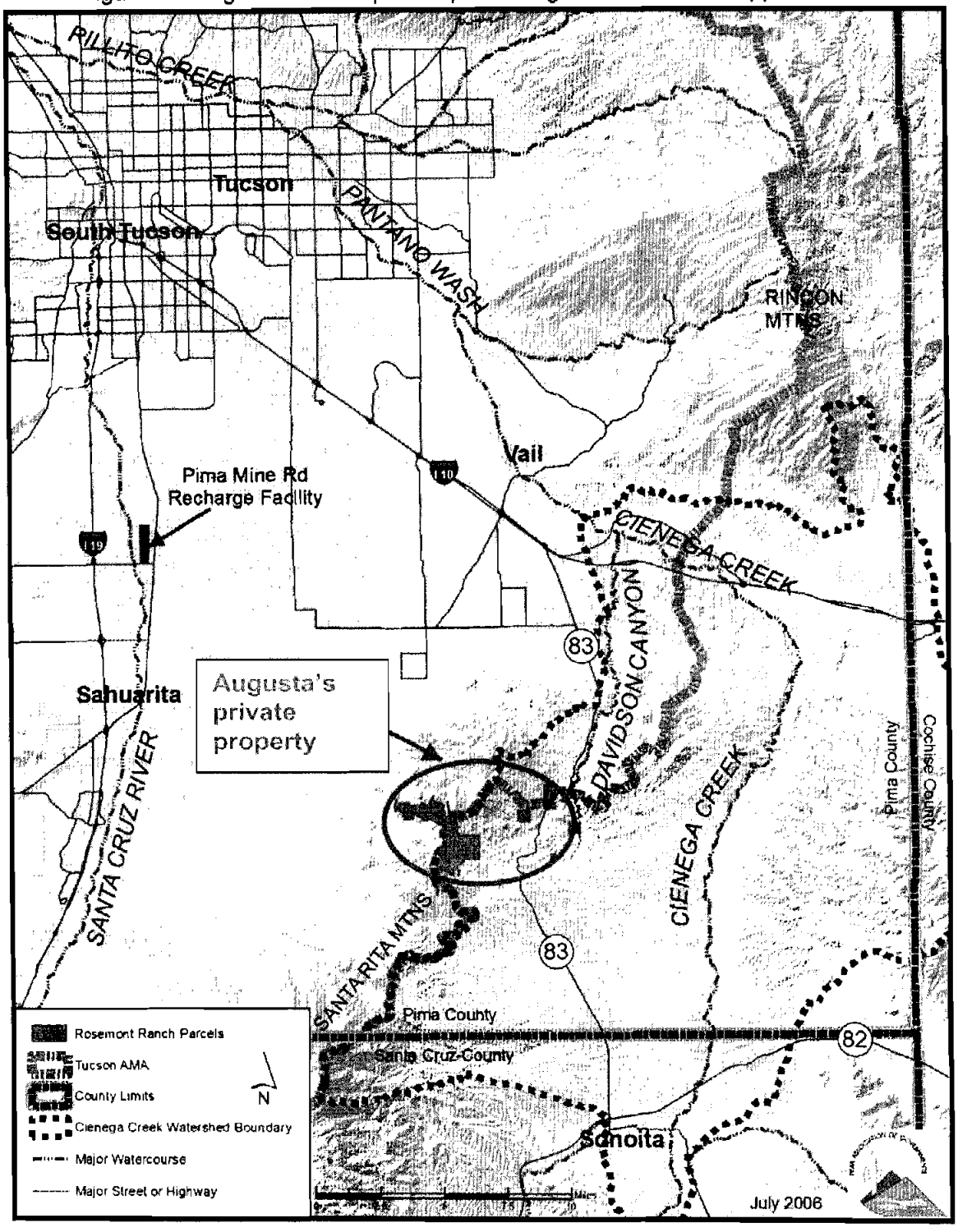
- renew or clarify its opposition to the mine through a new Board resolution modeled;
- request all technical information referenced in the plan of operations;
- form an interdepartmental review team to maintain involvement in the Environmental Impact Statement;
- defend its surface water claims along Davidson Canyon from harm by the proposed upstream Diversions by commenting as an affected party;
- insist on offsetting some of the biological impacts through land acquisition and management for preservation within Pima County, if the mine is approved;
- work with ADWR to review any materials submitted pursuant to dam safety requirements
- ask the Forest Service for a validity check on unpatented mining claims;
- lobby, if necessary, for a better outcome than a mine.
- submit comments to the U. S. Army Corps of Engineers regarding any Section 404 permits requested under the Clean Water Act; and
- review material submitted to ADEQ for an aquifer protection permit.

The Pima County Regional Flood Control District should:

- continue to work with Pima Association of Governments to zealously pursue the Davidson Canyon Unique Waters Nomination with ADEQ;
- continue to support and expand the PAG water monitoring program along Davidson Canyon;
- consult with its legal counsel regarding the exact status of the mining activities which remain subject to floodplain use permitting; and
- review and comment on all materials relating to hydrology to ensure impacts are adequately described and mitigated, and public safety during floods is assured.

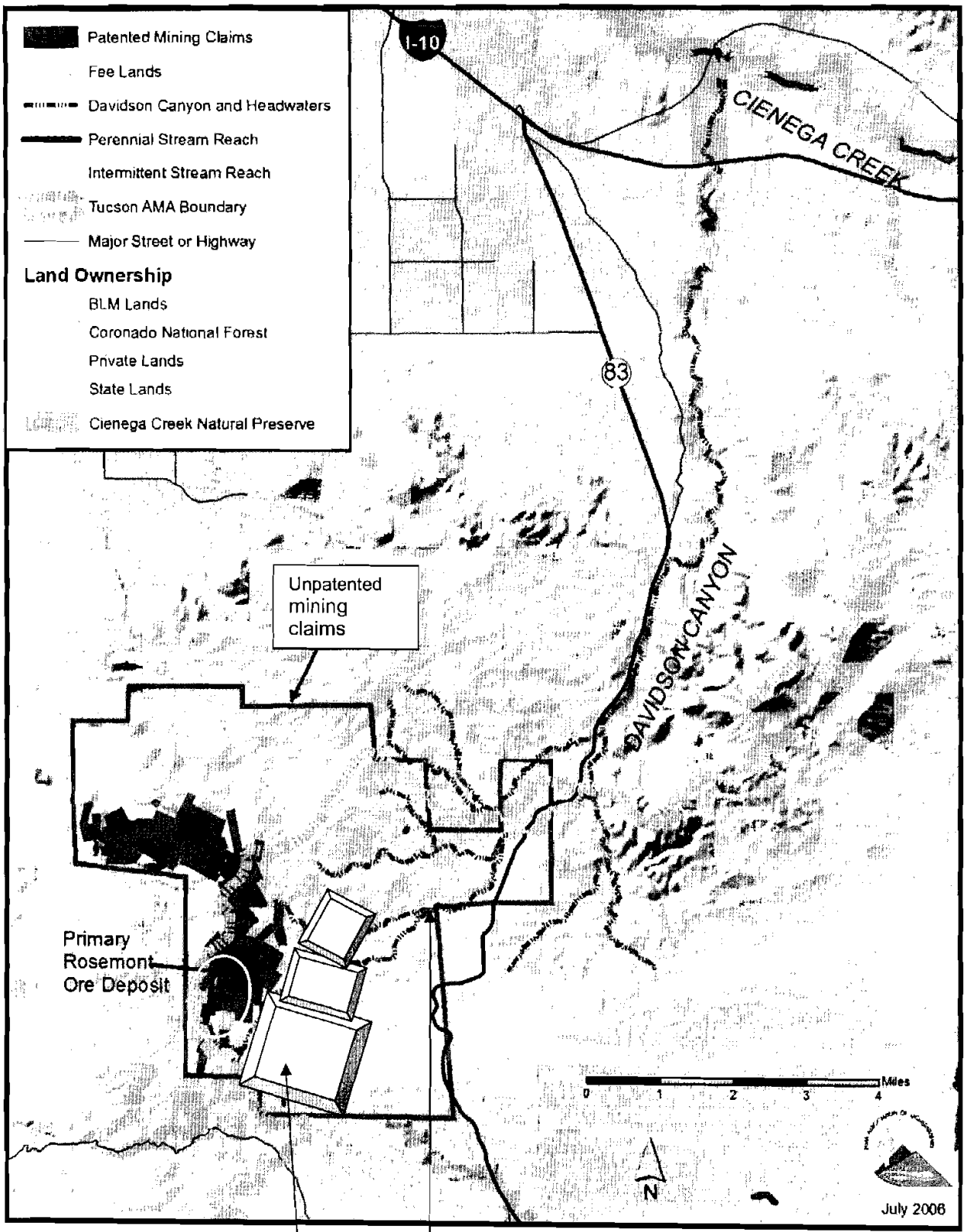
C: John Bernal, Public Works Director
Suzanne Shields, Director
Chris Cawein, Deputy Director
Kathleen Chavez, Water Policy Manager
Thomas Helfrich, Water Resources Division Manager

Figure 1. Regional Site Map – Proposed Augusta Resource Copper Mine



Map base provided by the Pima Association of Governments

Figure 2. Site Map -- Proposed Augusta Resource Copper Mine



Approximate location of tailings and stormwater dam based on the Augusta proposal

RESOLUTION NO. 1997- 93

RESOLUTION OF THE PIMA COUNTY BOARD OF SUPERVISORS IN OPPOSITION TO THE PROPOSED ROSEMONT RANCH LAND EXCHANGE BETWEEN THE UNITED STATES FOREST SERVICE AND ASARCO, INC., MINING COMPANY.

WHEREAS, the United States Forest Service and ASARCO, Inc., are proposing to enter into an exchange of land known as the Rosemont Ranch Land Exchange ("the Exchange"); and

WHEREAS, the proposed exchange will transfer one parcel of 13, 727 acres of National Forest land to ASARCO for 23 noncontiguous, private parcels totaling 2,222 acres scattered elsewhere in the State of Arizona; and

WHEREAS, the land proposed for exchange and use by ASARCO is located in Pima County, approximately 30 miles south of Tucson in the northeaster Santa Rita Mountains; and

WHEREAS, the public land proposed to be transferred to ASARCO is used extensively for recreation, including hiking, bird watching, bicycling, horseback riding, hunting, and off-road vehicle use, among other activities; and

WHEREAS, ASARCO intends to use the exchanged land for operations associated with a possible open pit copper mine, including mining waste disposal, sometime in the future; and

WHEREAS, the 13,727 acres of National Forest will be immediately removed from public ownership and right of access upon approval of the exchange; and

WHEREAS, the land proposed for exchange in prime wildlife habitat, home to abundant game and non-game species such as deer, javelina, mountain lion, quail, hawks, vultures, and songbirds; and

WHEREAS, sensitive, threatened and endangered species, such as the lesser long-nosed bat, the Pima pineapple cactus, the desert tortoise, the northern gray hawk, and the leopard from are known to inhabit the are of the proposed exchange; and

WHEREAS, open-pit copper mining is not compatible with the natural wilderness and habitat; and

WHEREAS, the economy and quality of life of the citizens of Pima County and southern Arizona are heavily dependent upon recreation and tourism and hence on abundant nearby public land; and

WHEREAS, the public interest of Pima County and southern Arizona will thus, in sum, not be furthered by the proposed Rosemont Ranch Land Exchange.

NOW, THEREFORE, BE IT RESOLVED by the Pima County Board of Supervisors, as follows:

Section 1. That the Pima County Board of Supervisors is hereby opposed to the proposed Rosemont Ranch Land Exchange between the United States Forest Service and ASARCO, Inc.

Section 2. That the Pima County Board of Supervisors hereby recommends to ASARCO, Inc., to withdraw their proposal for the Rosemont Ranch Land Exchange with the United States Forest Service.

Section 3. That the Pima County Board of Supervisors hereby requests to be recognized and kept informed as an affected party in the Environmental Impact Statement process.

PASSED, ADOPTED, AND APPROVED by the Pima County Board of Supervisors this 30th day of May, 1997

Attest:

Lori Godoshian, Clerk

Raul M. Grijalva, Chairman MAY 30 1997
Pima County Board of Supervisors

Approved as to form:

County Attorney

MEMORANDUM

Pima County Administration
Cultural Resources Office
201 North Stone Avenue, 7th Floor
Tucson, Arizona 85701-1207

Phone: (520) 740-6858
Fax: (520) 740-6320

DATE: September 26, 2006

TO: Nicole Fyffe, Pima County Open Space Program

FROM: Loy Neff, Program Coordinator

SUBJECT: Comments on the Rosemont Mining Project Plan of Operations

Dear Nicole,

I have reviewed the Rosemont Mining Project Plan of Operations and I have some comments regarding cultural resources issues pertaining to the plan.

1. The document was prepared by Westland Resources, Inc., a consulting firm that specializes in environmental and cultural resources, but speaking strictly to the issue of cultural resources, I think the document provides woefully inadequate information about the distribution, nature, and potential significance of the known archaeological and historic sites within the mining project area. The Cultural Resources section is two paragraphs of summary sentences that simply cite the number of known cultural resources within the mining project area and a one-mile radius (N=132; on page 28), and include a generalized statement about protection measures as follows, "...additional surveys will be necessary prior to the development of the mine..." (page 29). The document lacks an adequate report of a Phase I records review, which is the first step in any such cultural resources research, and doesn't provide even cursory summary tallies of site types, descriptions of the recorded archaeological sites, site distribution across the landscape, or summaries of the known, or potential, eligibility status of the recorded sites for inclusion in the National Register of Historic Places. There are no maps depicting site distribution, no summary tables, and so on.

2. The historic Helvetia Townsite, which is recorded as site AZ EE:1:80(ASM), is included in the western portion of the mining project area (Township 18 South, Range 15 East, Section 23; parcel #s. 305-58-0200 & 305-58-0210). As you may know, this is an important historic mining townsite and a Priority Cultural Resource (as determined in the Sonoran Desert Conservation Plan). This preservation project is 2004 bond project, CIP No. HP-04-405; Bond No. CR4.05. The CIP project is currently "on hold" status because of the involvement of the Augusta Resource Corporation in the acquisition of lands for the mining project. We think that saving and preserving the Helvetia Townsite is an important historic preservation goal and we'd like to be able to proceed with the acquisition and preservation effort.

Here's a synopsis of the Helvetia Townsite from our Priority Cultural Resources Database.

Helvetia Townsite
Site No. Az EE:1:80(ASM): This was a mining community, and like so many in the region, suffered the ups and downs of the marker for copper ore. Mines were probably in use after the civil war but it wasn't until the early 1880s that several large mining claims were developed including the Old Dick,

Heavyweight, and Tallyhoo mines. In the 1890s the Helvetia Copper Company formed and it was in response to the mining under this company that the community of Helvetia developed. Copper mining continued until 1911 when low copper prices lead to a shut down, although sporadic mining continued through the years of the First World War. The post office opened in 1899 and was closed by 1921.

In summary, I think the cultural resources section of the mining plan of operations should be extensively revised to thoroughly and comprehensively document the results of a Phase I records search of the mining project area. I hope there is a means by which we can address the issue the preservation of the historic Helvetia Townsite as well.

Please contact me with questions or comments?

Take care,

Loy Neff

MEMORANDUM

DATE: August 25, 2006

TO: Nicole Fyffe
County Administrator's Office

FROM: Ursula Kramer
Director UK

RE: Rosemont Mine Project Plan of Operations

Thank you for the opportunity to comment and offer suggestions regarding the Rosemont Project Plan of Operations.

Rosemont Mining project is required to obtain an Air Quality Activity Permit from Pima County Department of Environmental Quality (PDEQ), prior to starting the initial landclearing/earthmoving, trenching and road construction at their site. The permit requires they implement measures to control fugitive dust generated at the site. Dust control is required twenty-four hours a day, seven days a week. The opacity standard is 20%.

The source will be required to obtain a Title V Air Quality Operating Permit, from PDEQ, for the plant and mining operations if any pollutants emitted have the potential to be above major source thresholds. Emissions below major source threshold will require a Class II Air Quality Permit. The permit application and guidance documents are available for download on the PDEQ website. The permit application must include all processes and equipment, the potential to emit of each process, and proposed control measures for all pollutants. Air Quality Permits specify monitoring and recordkeeping requirements to document compliance.

Based on the scope of the proposed project, coverage under the Arizona Pollutant Discharge Elimination System (AZPDES) Multi-Sector General Permit (MSGP) will be necessary. The applicant is required to develop/implement a Storm Water Pollution Prevention Plan (SWPPP) and submit a Notice of Intent (NOI) to the Arizona Department of Environmental Quality.

If Rosemont Mining Facility will be providing potable water to 25 or more employees, the water distribution system will be considered a public water system (PWS) and Rosemont Mining will be required to maintain and operate their water distribution system in accordance with the regulatory requirements outline in the Arizona Administrative Code Title 18, Chapters 4 & 5, and the Arizona Department of Environmental Quality Engineering Bulletin Number 10. Rosemont Mining will be required to contact PDEQ to begin the process to receive a PSW identification number. There are requirements for the submittal of information to ensure the construction of the potable water wells and distribution system meet design guidelines and water quality criteria.

PDEQ registers Resource Conservation and Recovery Act (RCRA) Small Quantity Generators (SQG) and Large Quantity Generators (LQG). If Rosemont Mining generates greater than 220 lbs of hazardous waste in any calendar month they will be required to register with PDEQ.

If you have questions on the PDEQ program requirements, please contact me.

UK/KL/vlb

Nicole Fyffe

From: Priscilla Cornelio

Sent: Thursday, September 14, 2006 5:36 PM

To: Nicole Fyffe

Cc: Greg Santo; Ben Goff; Cheryl McDermed

Subject: Rosemont Mining Plan

Here are DOT's questions and comments on the Rosemont Mining Plan of Operations:

Note that access to the site is off of SR83, so the following comments are probably more appropriate to ADOT, rather than PCDOT.

1. What is the anticipated number of trucks hauling copper cathodes daily? It is stated that up to 2 trucks per hour may be used to transport concentrate, but no mention of the number of copper cathode trucks are given.
2. What is the anticipated number of trucks per day hauling chemicals (turpentine, sulfuric acid) and fuel (diesel and waste oil) on highways? What volume will be transported daily?
3. Will their be any contingencies in the event of a spill on private lands or public highways?

MEMORANDUM

Department of Transportation

PIMA COUNTY DOT

DATE: September 22, 2006

TO: Priscilla Cornelio, P.E.
Director

FROM: Dave Zalcski, P.E.
Structural Engineer

SUBJECT: Mine in Santa Rita Mountains

TO: JMB

9/27/06 TO: CMA for follow up additional information for report on mine proposal

You had forwarded a request from John Bernal to evaluate County maintained bridges in the area near the far east end of the Santa Rita Mountains. The purpose of this evaluation was to determine if any bridges were of such condition either structurally or functionally that they would be incapable of supporting heavy truck traffic associated with mining operations.

We have searched our National Bridge Inventory (NBI) database and performed a field inspection to determine if any unknown bridges exist in and around this general area. We focused our efforts on Houghton Road (from the mountains to I-10), Sahuarita Road (from Houghton Road to SR 83), and Wentworth Road (from Sahuarita Road to I-10). We have no County maintained bridges or structures on these roads. We do maintain a bridge on Greaterville Road (NBI #8300) which could provide access from the backside of the Santa Rita Mountains to SR 83 (Sonoita Highway). This bridge is structurally deficient and has a 10-ton load limit. It is also functionally obsolete as it has a very narrow deck.

In conclusion, it would appear that other than for one bridge, this area would not prohibit truck or mine traffic from creating any adverse operational issues for any of our bridges. However, it would be necessary to have a specific routing plan from the owners to determine all possible bridge locations and issues. Please let me know if you require further information or assistance on this matter.

xc: Ana Olivares, Deputy Director
Rick Ellis, Engineering Division Manager
David Cummings, Operations Division Manager

M E M O R A N D U M

PIMA COUNTY
NATURAL RESOURCES
PARKS • RECREATION

TO: Nicole Fyffe, Executive Assistant to County Administrator

FROM: Kerry Baldwin, NRPR- NR Division Manager

DATE: 9/21/06

SUBJECT: Rosemont Mine Project- Plan of Operation Review

We have reviewed the 7/31/2006 Plan of Operation prepared by WestLand Resources for the Augusta Resource Corporation on the Rosemont Mine Project. I think the review provided by Julia Fonseca of the Pima County Flood Control District did a good job in pointing out significant areas for concern in this initial analysis. I don't have a lot to add at this time. The real scrutiny will have to come during the NEPA process with USFS, operational planning with State level regulators and county level regulatory reviews. The document provided requires large leaps of faith that the project will in fact be developed, operated and closed meeting the proposed conditions and standards.

Some general comments that I might add:

Obviously this is a massive project that will permanently alter the character of the land on well over five square miles of currently native habitat. I find the statement that the mine will be designed as "..a sustainable development, defined as a development that meets the needs of the present without compromising the ability for future generations to met their needs.", a gross overstatement. The basic character of the land will be change forever, a significant amount of a nonrenewable resource will be extracted from the site permanently and no longer available to future generations, a huge pit and impact footprint will remain after the closure of the mine and potentially over 160,000 ac/ft, or almost 23 Billion gallons, of water from the local aquifers will be extracted. Don't call this sustainable.

NRPR will have no regulatory or compliance responsibility around this development. We would like to address elements of the long-term closure and road system decisions with the possibility of establishing recreational trail head opportunities at some point in the future if the project moves forward.

It would be very valuable to look at the environmental compliance and financial history of this Corporation in other projects within the US or Canada. I have concerns about the economic viability of the project if we were to see a drastic downturn in the world copper market price. Any commitments for funding, bonds etc. should be planned into the initial phase of development as an upfront cost.

Many of my concerns will be addressed in the more detailed NEPA process that the USFS will require. I think we need to meet directly with USFS planners to ensure our comfort with the process, timelines, public input process and review criteria they are proposing for this project.

Here are some additional things I noted that could be passed along.

- We need to see a more complete access/utility plan and corridors for property and have a traffic impact analysis available.

- I think we should request that the biological inventory and ultimately the wildlife section of the NEPA documentation include survey data and impact analysis for all of the SDCP vulnerable species not just T&E species or USFS sensitive species.

- I saw no mention of an analysis or impact of sound that will be generated as a result of the production activities.

- I think in the biological review a significant area will be invasive/non-native plant use and impact in the reclamation process. I'm concerned that the Forest Service might allow some species we would prefer not to be introduced into the area. I'd like to encourage that only local native plant species are approved for use in the project. Also, this should require an extended monitoring and control program for the area during and after closure to ensure that unwanted species are not established. At least 7 years of monitoring and control after closure wouldn't be unreasonable.

- The whole question of successful land reclamation is also a significant issue. Actual successful and sustainable reclamation efforts in the arid SW on large mining operations are few and far between. We need to aggressively work through the AZ State Mine Inspector's office and USFS on required viable plans. I would bet the bonds required will not begin to meet the actual costs of a potential failure of the proposed plans. The plan of operations notes the strategy of salvage of soil as major medium for reclamation. Much of the onsite soil will lose it's profile and characteristics due to mixing once it is removed from the site, moved to stockpiles, moved back to reclamation areas and treated with growing medium.

- Drainage plans as Julia points out are critical review points. The concept that this project will not ultimately impact downstream users and aquifers is overly optimistic.

I hope these short notes help. I think many of the generic comments we provided you on the previous mining activity review in the Empire mountain area will also apply here as well.

cc Rafael Payan, NRPR Director
Greg Hagen, NRPR Planner

Pima County

Development Services

Carmine DeBonis Jr.
Director

Office: 520.740.6506
fax: 520.740.6878

DATE: SEPTEMBER 18, 2006

TO: NICOLE FYFFE, EXECUTIVE ASSISTANT TO THE COUNTY ADMINISTRATOR

FROM: SHERRY RUTHER, ENVIRONMENTAL PLANNING MANAGER SR

RE: ROSEMONT MINING PROJECT – PLAN OF OPERATIONS DATED JULY 31, 2006.

Development Services has no purview to regulate the mining operations proposed in the Rosemont Mine Mining Plan of Operations as such activities are exempt from zoning regulations, including grading standards and permitting requirements, in accordance with A.R.S. 11-830. Section 18.01.030 of the Pima County Zoning Code states:

> "C. Statutory Exemptions
>
> **1. As specified in A.R.S. Section 11-830, the provisions of this code shall not prevent, restrict or otherwise regulate in any district or zone the use or occupation of land or improvements for railroad, mining, metallurgical, grazing or general agricultural purposes, as defined herein, provided the tract or premises so used is not les than five contiguous acres."**

However, we do offer the following observations for your consideration as Pima County engages the Augusta Resource Corporation (Augusta) for purposes of minimizing the potential adverse impacts of their mining activities on those resources integral to the Sonoran Desert Conservation Plan.

The proposed mining plan of operation (MOP) is preliminary, at best, and largely discusses details in concept only, especially those aspects related to environmental impact, reclamation, and mitigation. Even at this stage, it is clear that conducting mining operations on the scale as proposed will create significant legacies that must be accounted for including visual scars, potential escape of hazardous substances post-life of the mine, uncertainty of successful reclamation, and permanent alteration of the watershed. We are asked to take a leap of faith that the application of best management practices coupled with off-site compensations will negate these legacies.

As part of this leap, we are asked to buy into the long-term financial solvency of the mine operator (Augusta?) and the extended economic viability of the mining operation. The nature and extent of previous mining activity in the area suggests that mining this deposit under today's economic and technological scenario will be a more marginal enterprise than that of previous extractive ventures at this site. This taken in conjunction with recent closures of other copper mines in the region supplies plenty of evidence to justify a strong dose of skepticism about their ability to financially fulfill the promised mitigation. It seems prudent to secure as much of the mitigation commitments (financial and otherwise) in advance of the impacts as possible. We should particularly be exploring opportunities to reduce the Santa

Rita Mountains Regional Trust Endowment Fund's dependency on market-based contributions subject to the highly variable annual price of copper.

In addition to financial related issues, Pima County should actively investigate the mine operator's (Augusta?) general track record in so far as it is indicative of their ability to perform to the standards they propose. For example, it will be instructive to know whether they have successfully operated a comparable mining operation elsewhere? Have there been any previous environmental compliance issues or related litigation matters? What is their existing portfolio? If inadequacies surface, we should press for additional protections to bolster our confidence that such inadequacies will not affect operation and mitigation commitments.

Pima County would also be well-served to exercise full participation in the public review/comment opportunities afforded through the permitting processes of federal, state, and local governmental entities. Table 4 of the MOP lists more than 20 permits/approvals that are necessary in order to legally operate the mine. As the Forest Service's decision to approve/deny is the crucial step in moving forward with activating mining operations at Rosemont, Pima County should stay fully engaged in their National Environmental Policy Act decision-making process.

/sar

cc: Carmine DeBonis, Director – Development Services Department
Arlan Colton, Planning Official

From: Roger Featherstone [rfeatherstone@earthworksaction.org]
Sent: Friday, September 22, 2006 4:17 PM
To: Nicole Fyffe
Subject: Questions about the Rosemont Ranch Plan of Operations
Nicole,

Thanks for taking the time to meet with us yesterday about Rosemont Ranch. Following is a list of questions one of our consultants put together outlining what is missing from the Rosemont Ranch Plan of Operation. I'd imagine (or hope) that many of these missing component to the Rosemont Plan of Operation have already been mentioned, but just to be sure, here is a list compiled for us by Dr. Dave Chambers, Executive Director of the Center for Science in Public Participation. (Dave's list is not exhaustive but covers the basics.)

1. Detailed Geochemistry – Information on (1) waste rock; (2) pit walls; and, (3) sulfide ore floatation tailings and the oxide ore leach pad tailings. This information is needed to evaluate the long term risk of surface and groundwater contamination from mine waste.

2. Detailed Hydrologic Study of the Minesite. This information is needed in order to determine how surface water will be managed during and after mining, how much groundwater is present, and how groundwater moves off the minesite (potential pathways for contamination).

3. Waste Management Plan – Based on the results of the geochemistry information, how will mine waste be managed to minimize off-site contamination?

4. There is no liner proposed for tailings/waste rock disposal. Seepage from this material will probably contain metal contaminants. How will tailings/waste rock seepage be contained? How will this impact groundwater?

5. Pit Lake Water Quality – Will there be a pit lake on closure? If so, what will the water quality be in the pit lake? Will this require long term water treatment or management?

6. Quantitative Estimate of Closure and Long-Term Monitoring Costs – A detailed estimate of the reclamation and post-closure costs is needed in order to establish the amount of financial surety that will be required to cover mine closure in case of a mine bankruptcy.

Please contact me if you have questions or need more information.

Roger

EARTHWORKS
Protecting communities and the environment
from the impacts of destructive mining, digging and drilling.

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