



## 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

April 12, 2007

Beverley Everson, Forest Geologist  
Coronado National Forest  
Nogales Ranger District  
300 West Congress Street  
Tucson, Arizona 85701

Re: **Augusta Resource Corporation Drilling Project**

Dear Ms. Everson:

Below are Pima County's comments in response to your request for comments regarding Augusta Resource Corporation's exploratory drilling Plan of Operations for the Rosemont Mine in the Santa Rita Mountains.

### Need

The need for the project components is not adequately presented. Each drill hole and roadway access should be justified to its purpose, for example, geotechnical versus hydrogeological data collection. There has been a great deal of drilling by previous entities. Why is more drilling needed?

### Alternatives

There are no alternatives addressed in this proposal. While the drilling alone may not cause significant impact, the cumulative impacts of the drilling program plus previous and subsequent investigations may do so. In addition, the "but-for" proposed copper processing facilities will significantly alter the landscape. Pima County would like to see a full range of alternatives discussed, including no action (meaning a reliance upon existing data) and a reduced impacts level of drilling. The Forest Service has a duty to minimize impacts to surface resources. Without alternatives, the Forest Service cannot determine whether the proposal minimizes impacts to surface resources.

### Affected Resources

Several of the drill sites are near or must be accessed through riparian areas. Riparian areas are considered to be one of the most vital areas in a desert environment, with up to 75 percent of all species in Arizona relying on a riparian environment. Evaluate alternative alignments for access. Ensure that the heavy vehicles and increased traffic through these riparian areas using proposed access routes do not impact or alter the resource. Avoid and mitigate any damages

Beverley Everson  
Augusta Resource Corporation Drilling Project  
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incurred to these areas. Will there be surveys for protected, rare, and threatened and endangered species prior to construction of drill pads and access roads? Previous National Environmental Policy Act (NEPA) documents have indicated the presence of Chiricahua leopard frogs and other listed species. In addition, Lessor long-nosed bats may roost in the area.

Regarding potential impacts to cultural resources, efforts need to be taken to survey the proposed drill sites and roads for archaeological and historical sites and avoid these sites by moving the drill rigs.

#### Mitigation

The drilling proposal states that reseedling will be done on all areas of surface disturbance, including all temporary access roads and drill sites. Verify that the seed mix uses species native to the area and that the mix is free of non-native species, and contains only species indigenous to Pima County. Use Sonoran Desert Conservation Plan plant list for the township as a basis (see website at: <http://www.pima.gov/cmo/sdcp/species/TRspeciesListing.html>). To ensure reseedling success, seed should be dispersed at an appropriate time of the year. Recontouring of the access roads and drill pads should encourage seeding success (soil scarification, seed imprinting, etc.). Monitoring of the drill sites and access roads for erosion, reseedling success and invasive species plan colonization for two years after initial reclamation, should be required.

Off-highway vehicles (OHV) use is a popular recreation activity in southern Arizona. Ensure proper road closure and restoration techniques are used to minimize the creation of "wildcat," or unauthorized trails from the proposed access roads. Close unauthorized roads to OHV traffic as a mitigation measure.

#### Connected Actions

Connected actions trigger other actions, which may require environmental impact statements (EIS). The proposed drilling will be done to support additional mining activities, which will require a comprehensive review. Pima County would like to ensure an EIS is prepared for future mining activities.

Thank you for this opportunity to comment. It is my understanding that Augusta Resource Corporation has not yet submitted the Comprehensive Mining Plan of Operations for the Rosemont Mine. I would appreciate receiving notice as soon as that plan is submitted to the Forest Service.

Sincerely,



C.H. Huckelberry  
County Administrator

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



United States  
Department of  
Agriculture

Forest  
Service

Coronado National Forest  
Nogales Ranger District

303 Old Tucson Road  
Nogales, Arizona 85621  
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FAX (520) 281-2396

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File Code: 2810

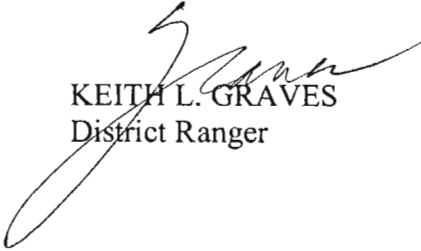
Date: March 25, 2007

Richard Elias  
Chairman  
Pima County Board of Supervisors  
130 W. Congress  
Tucson, AZ 85701

Dear Chairman Elias;

Enclosed is an Opportunity to Comment for explorative drilling and access road construction by Augusta Resource Corporation in the Rosemont Valley area of the Santa Rita Mountains. Please submit any comments you have concerning the proposed activity to Forest Geologist Beverley Everson. The contact information for Ms. Everson is included in the enclosure.

Sincerely,

  
KEITH L. GRAVES  
District Ranger

MAR 27 2007



# SCOPING NOTICE/OPPORTUNITY TO COMMENT

## PROPOSED GEOTECHNICAL DRILLING AT ROSEMONT RANCH

USDA Forest Service  
Coronado National Forest  
Nogales Ranger District  
Pima County, Arizona  
Townships 18 and 19 South, Range 16 East

### *Background*

On March 1, 2007, Augusta Resource Arizona Corporation (Augusta) submitted a Plan of Operations to the Coronado National Forest (CNF), requesting approval to drill exploratory holes on unpatented mining claims in the Helvetia-Rosemont Mining District, 30 miles southeast of Tucson, in Pima County, Arizona (see Figure 1). The holes would be drilled to obtain geotechnical data and information in support of Augusta's determination of whether or not subsurface conditions are conducive to the construction of copper processing facilities, such as a mill, roadways, and waste rock and tailings placement areas.

This Scoping Notice/Opportunity to Comment is being offered to the public to provide for early and meaningful public involvement in the National Environmental Policy Act (NEPA) review of the drilling Plan of Operations, which is summarized below. Comments received in response to this notice will assist the Forest Service in defining issues and concerns associated with the proposal.

### *Purpose and Need*

The Forest Service's proposed action is to approve a Plan of Operations for mineral exploration only on lands in the

public domain, in this case, National Forest System land. As a Federal land management agency, the Forest Service has a legally mandated obligation under the General Mining Law of 1872, which declared all mineral lands of the public domain open to exploration and purchase, and authorized the current procedure for locating placer and lode claims. All proposed activities, however, must be conducted in accordance with the land management and resource protection objectives expressed in the CNF Land and Resource Management Plan for (1986, as amended).

### *Project Description*

Approval of the proposed Plan of Operations would allow the following activities to occur.

Drilling would occur on a specific segment of Augusta's unpatented mining claims on the Rosemont Ranch in Township 18 South, Range 16 East, Sections 21, 28, 29, 30 and 31 and in Township 19 South, Range 16 East, Sections 5, 6, 29, 30 and 32, Pima County, Arizona (see Table 1 and Figure 2 for drill site locations).

Three truck-mounted CME-75HT drill

rigs would drill 15 geotechnical drill holes to depths ranging from 100 to 200 feet at the sites shown in Figure 2. The three rigs would be operated concurrently, seven days a week, during daylight hours. In general, there would be five people present at each drill site, including a driller, three helpers, and a geologist. Drill pipe would be transported to each site on a trailer pulled by a support truck. Water for the operation, including that necessary for drilling circulation and for dust abatement, would be transported to drill sites in 2000-gallon water-trucks. A maximum of one water-truck trip per day to each drill site is anticipated. Water would be obtained from the Rosemont Tank on Augusta's private property near Rosemont Ranch.

Each drill site would contain a portable toilet that would be serviced regularly. Trash, sewage, human waste and debris generated with this project would be removed from National Forest land and disposed of at public waste facilities.

All drill holes would be completed using a rotary method. Two of the holes (BH-9 and BH-26), would undergo *in-situ* permeability testing, which involves drilling the uppermost portions of the hole (in unconsolidated sediments), using a hollow-stemmed auger in order to facilitate sampling. Soil would be extracted from the auger hole and then logged by a geologist before being sent off-site to a laboratory for testing.

Once bedrock is encountered, the drill rig would be converted to apply HQ (2.5-inch diameter) or NQ (1.9-inch diameter) core-drilling methods to obtain rock samples. Bentonite clay or drilling polymer may be used as a drill lubricant. Cores would be logged by a geologist,

boxed and sent to an off-site laboratory for analysis.

Two drill holes, BH-9 and BH-26, would undergo packer testing and/or falling head tests, to determine the permeability of rock and soil. Packer testing uses two inflatable rubber balloons to seal off a zone of rock within the drill hole. Permeability is measured by the rate at which water can be added to that zone. Falling head tests are completed by filling the drill hole with water and measuring the time it takes for the water to infiltrate, thereby providing an estimate for soil permeability.

Each drill site would create disturbances with a maximum area of 30 feet by 60 feet. Drill pads would be leveled using a D10R bulldozer and a 5-foot by 8-foot by 5-foot-deep sump would be excavated with a John Deere 200C track hoe.

Of the drill sites, 12 would be located adjacent to existing roads and the remaining three sites would be accessed on newly constructed temporary, low-standard access roads that would connect the three drill sites to existing roads (see Figure 2). About 1200 feet of 12-foot-wide, low-grade access road would be constructed using a D10R bulldozer.

No maintenance of existing roads is proposed. Temporary run-off control using straw wattles, straw bales and silt fencing may be necessary if excessive precipitation is experienced during the course of operation. Upon completion of the project, all temporary access roads would be recontoured, seeded and closed.

Prior to commencement of drilling, Augusta would be required to obtain neces-

sary Federal, state, and local environmental and operating permits and present them to the Forest Geologist for review. Before drilling is undertaken, Augusta must post a reclamation bond with the Forest Service in an amount sufficient to assure the completion of all reclamation obligations, which are identified in the Plan of Operations and in the agreed-to conditions and stipulations appended thereto.

Reclamation would include, but would not be limited to: capping all holes with cement and a sanitary seal per Arizona Department of Water Resources regulations, removing all equipment and other non-native materials from Forest lands, re-contouring and stabilizing drill sites and temporary access roads to minimize erosion, and seeding all areas of surface disturbance.

Reclamation may also include closure of some existing unauthorized, non-system roads that would be used for access to some of the drill sites. These roads include the road used for access to drill holes BH-12 and BH-NEW02 from Forest Road (FR) 231, access to BH-51 off FR 4063, access to BH-50 off of FR 231, and access to BH-52 off of FR 231. FR 4051A, a system road, may also be closed with reclamation. This road would be used to access BH-20 and BH-3.

It is anticipated that the entire project, including access-road construction and site preparation, drilling, and reclamation would be completed within 40 days of project initiation. Drilling would be expected to begin shortly after the NEPA review process is completed and a decision is made by the Nogales District

Ranger to approve the Plan of Operations.

### *Requests for Comments*

You are encouraged to offer comments about the proposed project as soon as possible<sup>1</sup>. Comments received by the Forest Service no later than April 12, 2007, would be considered in the environmental impacts analysis of the proposed activity. Comments related to the Advocacy of the project shall not be considered as part of the project scope unless they are based on or linked to a specific issue or concern.

Written comments may be submitted by U.S. postal mail to Ms. Beverley Everson, Forest Geologist, Coronado National Forest, 300 West Congress Street, Tucson, AZ 85701; by facsimile to (520) 388-8305; and by electronic mail (email) to [beverson@fs.fed.us](mailto:beverson@fs.fed.us). Please note in your correspondence that your comments are being made with regard to the *Augusta Resource Corp. Drilling Project*.

For further information about the pro-

<sup>1</sup> You are advised that comments and personal information associated with them, such as names and addresses, become part of the Administrative Record for the NEPA review. As such, they may be made available to a 3rd-party upon request pursuant to the Freedom of Information Act (FOIA). If you do not wish for your personal information to be subject to FOIA, you may choose not to include it with your comments. Alternatively, you may request an exemption from FOIA with your comment submittal. Should you choose the latter, you will be informed by the Forest Service as to whether or not your request qualifies for an exemption. If it does not, you will be afforded the opportunity to resubmit your comments without personal information or to withhold them.

ject, to offer verbal comments, or to schedule in-person comments, please contact Ms. Everson at (520)-388-8428 between 8:00 and 5:00 p.m. Monday through Friday, excluding Federal holidays.

*Thank you for your interest and participation in activities of the Coronado National Forest.*

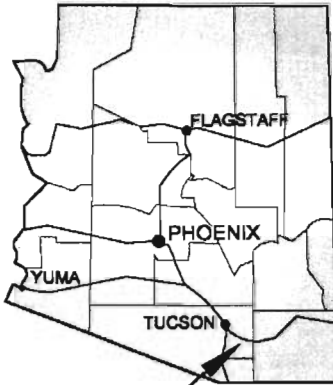
**Table 1. Borehole Locations and Claim Information (all coordinates in NAD UTM 83)**

<b>Borehole Identifier</b>	<b>UTM Coordinates (ft)</b>		<b>Legal Description</b>	<b>Claim Name</b>
	<b>Northing</b>	<b>Easting</b>		
BH-03	11560263	1723668	T18S, R16E, SW ¼ Section 21	Kid 46
BH-09	11558998	1727926	T18S, R16E, NW ¼ Section 28	Wasp 333
BH-12	11558586	1726519	T18S, R16E, NE ¼ Section 29	Falcon 15a
BH-18	11558294	1718784	T18S, R16E, NW¼ Section 30	Catalina 2
BH-20	11558535	1723660	T18S, R16E, NW ¼ Section 29	Falcon 4a
BH-26	11557867	1720717	T18S, R16E, NE ¼ Section 30	Catalina 8
BH-42	11555000	1719221	T18S, R16E, SE ¼ Section 30	Rosemont 15
BH-50	11549716	1716976	T18S, R16E, SW ¼ Section 31	Deering Springs 15a
BH-51	11549101	1725059	T19S, R16E, NE ¼ Section 5	Max 97
BH-52	11548132	1716502	T19S, R16E, NW ¼ Section 6	Max 14b
BH-54	11544995	1717678	T19S, R16E, SW ¼ Section 6	Deering Springs 23a
BH-NEW01	11558801	1719751	T18S, R16E, NE ¼ Section 30	Catalina 6
BH-NEW02	11557926	1725422	T18S, R16E, NE ¼ Section 29	Falcon 1a
BH-NEW03	11556525	1726381	T18S, R16E,SE ¼ Section 29	Falcon 19a
BH-NEW04	11552881	1726480	T18S, R16E, NE ¼ Section 32	Wasp 212



# ARIZONA

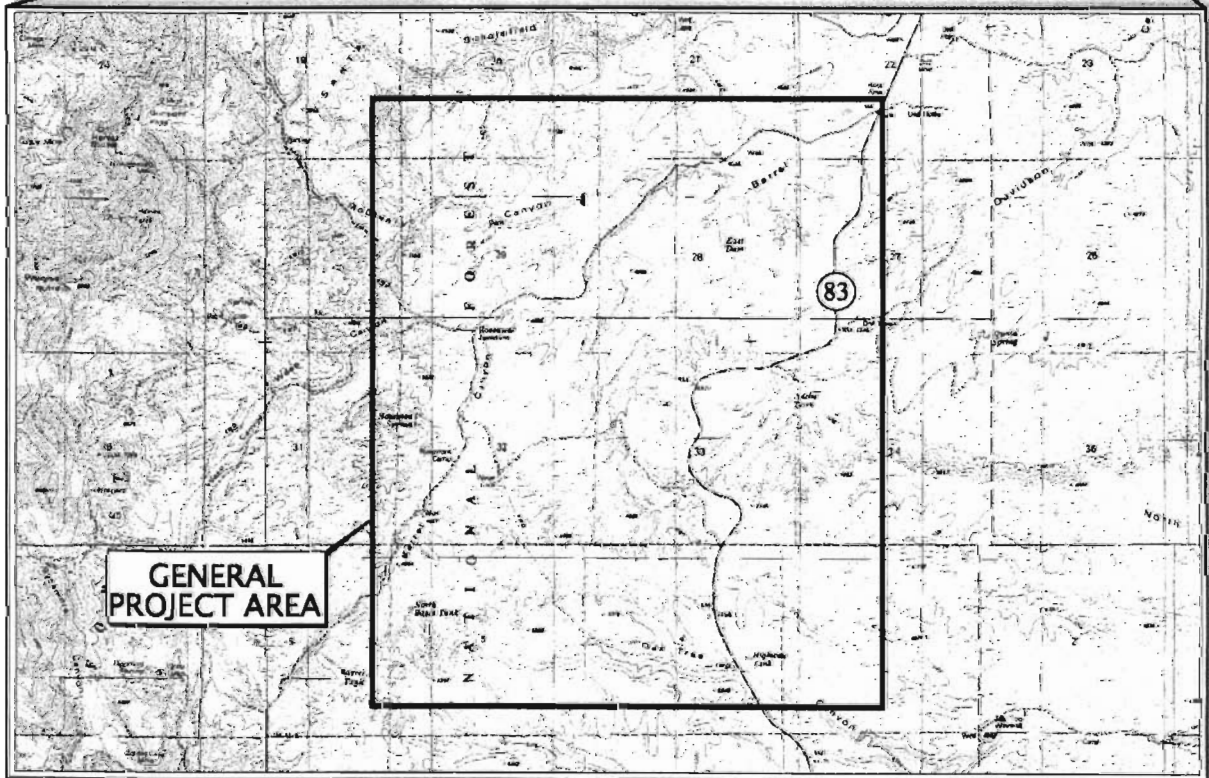
# SOUTHEAST PIMA COUNTY



PROJECT  
LOCATION



Approximate Scale 1" = 10 Miles



GENERAL  
PROJECT AREA

0' 2500' 5000'

APPROX. SCALE: 1" = 5000'

T.18S.,R.16E., Portion of Sections 19-22, 27-30, & 31-34

T.19S.,R.16E., Portion of Sections 3-6.

Pima County, Arizona

Empire Ranch USGS 7.5 Minute Quadrangle

## ROSEMONT PROJECT Geotechnical Drilling Operations

VICINITY MAP

Figure 1