THE IMPACT OF
THE ROSEMONT MINE
ON THE ECONOMIES OF
PIMA COUNTY, ARIZONA, AND
THE UNITED STATES

A REPORT ON THE EXPECTED IMPACTS OF
AUGUSTA RESOURCE CORPORATION'S ROSEMONT MINE
ON PERSONAL INCOME, BUSINESS SALES,
AND GOVERNMENT REVENUES
IN PIMA COUNTY, ARIZONA, AND THE UNITED STATES

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August 20, 2007
Memorandum

To: Beverly Everson
Cc: Tom Furgason
From: Kathy Arnold
Doc #: 013/10 – 15.3.2
Subject: Transmittal for Previously Transmitted Information
Date: March 17, 2010

Rosemont understands there are a number of reports that are included for the record that do not have a transmittal letter attached to them. This memorandum is designed to provide the transmittal for those documents that were previously submitted. Those reports are:

1. Background Ambient Noise Study, Tetra Tech, dated October 2008
3. WEAC Economic Reports provided by Rosemont and prepared by WEAC for the Arizona Mining Association
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SUMMARY

The Impact on Pima County

The economy of Pima County, Arizona, will gain an average of more than $256 million each year from the Rosemont mine and plant of the Augusta Resource Corporation during the anticipated 19-year productive life of the mine. That total will be the combined sum of almost $156 million of direct and more than $100 million of indirect contributions of the mine's operation to personal income, business sales, and local government incomes in the county. The enterprise will provide nearly 500 jobs directly and generate a total of almost 1,700 jobs directly and indirectly in Pima County.

The greatest gain from the Rosemont Mine will be realized by the business community. During the 19-year productive life of the project, Pima County business firms will realize sales averaging over $168 million annually from the project, with more than $120 million of that coming directly from the new copper producing operations and another $48 million generated indirectly as the direct impacts of the project's operation ripple through the local economy.

Individual residents of Pima County also will gain substantially from the Rosemont Mine. The average of about 500 workers who will be employed by Augusta Resource Corporation to operate the new production facility will be paid more than $29 million per year (at 2006 wage rates), while other workers in Pima County will get an additional $42 million indirectly from the new copper producing operation. That will increase personal income in the county by a total of nearly $72 million annually during the 19-year productive life of the mine.

Local governments also will share in the benefits of the Rosemont Mine. County, city, school district, and other local government units in Pima County will get an average of more than $16 million directly and indirectly each year during the 19-year productive life of the new copper production facility. About $6 million of that will come directly from the project each year, and $10 million will come indirectly as the company's direct contributions to the local economy circulate and recirculate.

The Impact on Arizona

The economy of Arizona will benefit by an average of almost $488 million annually from the Rosemont Mine during the mine's anticipated 19-year productive life. About $224 million of that average annual benefit will come directly from the payrolls, purchases, and taxes paid by the new enterprise, while another $264 million will be generated indirectly as the direct incomes circulate through the Arizona economy. The state's economy will gain about 3,000 jobs directly and indirectly from the operation of the new mine and plant.

The state's businesses will benefit the most from the Rosemont Mine, realizing an average of $312 million in sales each year directly and indirectly as a result of the new copper production facility during the 19-year productive life of the enterprise. More than $163 million of that will be obtained each year directly from the project's purchases of goods and services, while over $149 million will be generated indirectly as a result of personal, business, and government income circulation.
Arizona residents, many of them living in the metropolitan areas of the state, will receive almost $126 million of personal income each year as a result of the Rosemont Mine operations over the 19-year productive life of the project. That will include the mine's 500 employees, who will benefit directly by over $29 million annually, and another 2,500 workers in Pima County and throughout the state who will have personal income of $97 million provided each year indirectly by the new copper production facility.

State and local governments also will share in the benefits of the Rosemont Mine. State, county, city, school district, and other local government units in Arizona will get an average of nearly $49 million directly and indirectly each year during the 19-year productive life of the new copper production facility in Pima County. About $31 million of that will come directly from the project each year, and over $17 million will come indirectly as the company's direct contributions to the Arizona economy circulate and recirculate. Much of the gain in government revenues will go to schools in the state's larger metropolitan areas.

The Impact on the United States

The economy of the United States will benefit by more than $2.3 billion per year as a result of the operation of the Rosemont Mine during its 19-year productive life. That will include more than $163 million annually in Federal Government revenues and almost $520 million in personal income each year for Americans, providing more than 11,000 jobs nationwide.

American business firms will benefit by more than $1.5 billion annually in sales both directly and indirectly from the Rosemont Mine. That will consist of more than $231 million in sales directly to the new mining enterprise and another $1.3 billion in sales generated indirectly as the mine's direct economic contributions circulate and recirculate through the nation's economy.

State and local governments will get almost $132 million in additional revenues each year directly and indirectly from the Rosemont Mine. Little more than a third of that will go to state and local government units in Arizona.
THE ROSEMONT PROJECT

The Rosemont mine and plant of the Augusta Resource Corporation, will be located on 4,200 acres of both private and public land in the Helvetia and Rosemont mining districts of eastern Pima County, Arizona, about 30 miles southeast of Tucson. The proposed facility will consist of copper production facilities designed to produce an average of 250 million pounds per year of copper, mostly in copper sulfide concentrates, over the anticipated 19-year productive life of the project. The facility is also expected to yield 2.5 million ounces of silver per year in the copper concentrates, as well as 5 million pounds of molybdenum per year in separate molybdenum sulfide concentrates. The metal bearing concentrates will be shipped elsewhere for smelting and refining to produce finished marketable products. Some of the copper will also be produced as copper cathodes by electrowinning from copper-bearing solutions obtained by leaching ore that is high in oxide copper minerals.

The project's physical facilities will include an open pit mine and appropriate crushing, grinding, sulfide flotation, solvent extraction, and electrowinning plants plus shops, offices, and other ancillary facilities as well as tailings and waste storage areas. The project is expected to require about two years for mine development and plant construction, with copper production starting in about 2009.

The Rosemont mine and plant is expected to require the investment of about $700 million in capital expenditures for mine development work, construction of the new ore treatment plant and the purchase of new equipment for mining and other operations.

During the development and construction phase before the start of production, it is expected that Augusta Resource Corporation will employ a variable number workers at the Rosemont site, with construction contractors employing an additional number. Once the initial construction phase of the Project is completed, the Rosemont operation is expected to employ an average of about 500 workers at the site. During the entire 19-year period of production, it is anticipated that employment will average about 500, with added numbers employed by construction, mining, and repair service contractors.

The Rosemont mine and plant will be a major user of electrical energy. The facility's consumption of electricity in both the mining and ore beneficiation operations is expected to average about 597 million kilowatt hours per year over the 19 years of actual production. That consumption will be somewhat less during the initial development and construction phases of the project.

The development and construction phase of the Rosemont Project is likely to have a major impact on the economy of Pima County and a significant impact on the economies of Arizona and the nation as well because of the size of the initial investment required. The biggest economic impact, however, will result from the full 19-year operating life of the Rosemont mine and plant.
THE IMPACT OF THE ROSEMONT MINE ON THE ECONOMY OF PIMA COUNTY

Total Impact

The economy of Pima County, Arizona, will benefit by more than $256 million per year as a result of the combined direct and indirect contributions of the Augusta Resource Corporation’s Rosemont Mine to personal income, business sales, and government revenues in the county. That gain represents the average annual impact on the county’s economy during the 19 years the mine is expected to be in actual production. The operation of the mine will result in the direct and indirect addition of almost 1,700 new jobs to Pima County’s economy.

The greatest benefit from the contributions of the Rosemont Mine to the economy of Pima County will go to the county’s business community. The average of more than $168 million in sales that will be realized each year by businesses in the county directly and indirectly as a result of the Rosemont Mine will comprise two-thirds of the new facility’s total economic impact on the county.

Individual residents of Pima County also will gain a substantial amount of personal income as a result of the operation of the Rosemont mine and plant. The average of nearly $72 million in personal income to be received each year by residents of Pima County both directly and indirectly from the Rosemont operations will represent 28% of the project’s total contribution to the local economy. It will pay the wages and salaries of 1,660 workers in Pima County, including those directly employed at the mine and those employed by its suppliers of goods and services and local government employees paid with tax funds provided directly and indirectly by the Rosemont Mine.

County, municipal, school district, community college, and other local governments in Pima County also will share in the economic benefit generated by the Rosemont Mine. The new copper producing operations will boost the revenues received annually by local governments in the county by an average of $16 million.

The total impact of the Rosemont Mine on the economy of Pima County will be the result of the direct spending by Augusta Resource Corporation for payrolls, purchases of goods and services, and taxes, combined with the indirect increases caused by the circulation through the local economy of the money provided by those direct payments. That circulation of direct impact dollars will create a multiplier or ripple effect that will make the combined direct and indirect impact of the Rosemont Project on the county that is 63% more than the direct impact alone, as shown in Table 1.

Direct Impact

The direct economic impact of the Rosemont Project on Pima County during each year of production will average almost $156 million in direct payments to employees, suppliers of products and services, and local tax collectors. The total will be distributed as shown in Table 2.

The largest share (77%) of the average annual direct contribution of the Rosemont
Economic Impacts of the Rosemont Mine

Table 1
THE COMBINED DIRECT AND INDIRECT IMPACTS OF THE ROSEMONT MINE ON THE ECONOMY OF PIMA COUNTY

During its 19 years of production, the Rosemont Mine will have an average annual:

DIRECT IMPACT ON THE PIMA COUNTY ECONOMY OF: $155,923,000 including direct contributions to:

- Personal income of $29,450,000
- Business sales of 120,239,000
- Local government revenues of 6,234,000

which, because of the circulation and recirculation of income through the Pima County economy, will result in an:

INDIRECT IMPACT ON THE COUNTY'S ECONOMY OF $100,277,000 including indirect gains in:

- Personal income of $42,151,000
- Business sales of 48,257,000
- Local government revenues of 9,869,000

to create a:

COMBINED IMPACT ON THE COUNTY'S ECONOMY OF $256,200,000 including combined direct and indirect gains in:

- Personal income of $71,601,000
- Business income of 168,496,000
- Local government revenues of 16,103,000

Total jobs gained directly and indirectly 1,660
Average number of jobs gained directly 500

Source: Western Economic Analysis Center
Impact on the Economy of Pima County

Mine to the economy of Pima County during the 19-year productive life of the enterprise will go to local business firms. The more than $120 million to be paid directly to the Pima County business community each year will go to pay for a variety of products and services to be used in the new copper production operations.

The biggest portion of that total (almost $42 million) will go to buy electrical energy and other services from local public utilities. A somewhat smaller amount, over $38 million, will go to buy equipment and supplies from local wholesale operations. Nearly $15 million will be paid to local construction contractors, and another $8 million will be paid to local manufacturers. More than $7 million will be paid to other mining firms for contract mining operations, and over $4 million will go to local firms providing business, professional, and repair services. Another $3.6 million will be paid to firms providing transportation services. The remaining $1.7 million will go to firms in a wide range of industries providing both products and services for use in the new facility.

A much smaller share (about 19%) of the direct contribution of the Rosemont mine and plant to the economy of Pima County during an average year of operation will go to the approximately 500 Augusta Resource Corporation employees who are residents of the county. The $29 million in personal income provided directly to the county's residents by the Rosemont operations will represent almost a fifth of the new mine's direct impact on the Pima County economy.

Most of the direct payments to local governments will be paid in the form of property taxes on the new production facilities and copper orebody. A smaller amount will come from the automatic apportionment of the severance taxes paid to the State of Arizona on the copper produced from the Rosemont Mine and of state sales taxes paid on some of the increased purchases of products and services for the copper producing operation.

The estimated contribution to local governments in Pima County assumes no effective reduction in property tax rates below those in effect in 2006 and an increase in local government spending as a result of the increased revenues available. If, however, local government spending is held constant, and the increase in assessed property valuations created by the opening of the Rosemont mine and plant results in a decrease in property tax rates, then the direct contribution to local government revenues through the property tax will be somewhat less than under the 2006 tax rates. The difference will represent an effective tax reduction for other Pima County owners of residential and commercial property and thus represent a positive, though passive, impact on the local economy.

Indirect Impact

The more than $100 million of indirect income created by the circulation and recirculation of direct contributions to personal income, business sales, and government revenues are shown in Table 1 and in the
### Table 2

**THE DIRECT IMPACTS OF THE ROSEMONT MINE ON THE ECONOMY OF PIMA COUNTY**

During each of its 19 years of production, the Rosemont Mine will provide directly an average annual total of:

**PERSONAL INCOME FOR RESIDENTS OF PIMA COUNTY OF:** $29,450,000

and:

**SALES REVENUES FOR PIMA COUNTY BUSINESSES OF:** $120,239,000

including sales to the enterprise by:

- Public utilities of: $41,799,000
- Wholesalers of: $38,375,000
- Construction contractors of: $14,870,000
- Manufacturers of: $8,076,000
- Other mining firms of: $7,176,000
- Service businesses of: $4,577,000
- Transportation firms of: $3,644,000
- All other businesses of: $1,722,000

and:

**LOCAL GOVERNMENT REVENUES IN THE COUNTY OF:** $6,234,000

including amounts paid directly to:

- Public schools of: $3,059,000
- Graham County government of: $2,203,000
- Community college district of: $371,000
- Municipal and other governments of: $601,000

to create a:

**TOTAL DIRECT IMPACT ON THE COUNTY’S ECONOMY OF:** $155,923,000

*Source: Western Economic Analysis Center*
Combined Impact Matrix shown below. That indirect income will add to the direct contributions of the Rosemont Mine by 64% to create an average annual economic impact on Pima County of more than $256 million during the mine’s 19-year productive life.

**COMBINED IMPACT MATRIX**

Direct and indirect impact of
THE ROSEMONT MINE
on the economy of
PIMA COUNTY
in
AN AVERAGE YEAR OF PRODUCTION

**IMPACTS (amounts in dollars)**

<table>
<thead>
<tr>
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<th>DIRECT IMPACT</th>
<th>INDIRECT ECONOMIC IMPACT</th>
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<td>BUSINESS</td>
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<tr>
<td>BUSINESS</td>
<td>120,239,000</td>
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<tr>
<td>GOVERNMENT</td>
<td>6,234,000</td>
<td>3,695,363</td>
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<tr>
<td>TOTAL DIRECT</td>
<td>155,923,000</td>
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<tr>
<td>TOTAL INDIRECT</td>
<td>100,276,892</td>
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<td>COMBINED</td>
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</table>

**MULTIPLIERS**

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<th>PERSONAL</th>
<th>BUSINESS</th>
<th>GOVERNMENT</th>
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<tr>
<td>PERSONAL INCOME</td>
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<td>BUSINESS INCOME</td>
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<td>0.2125</td>
<td>0.0506</td>
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<tr>
<td>GOVERNMENT REVENUES</td>
<td>0.5928</td>
<td>0.4591</td>
<td>0.0506</td>
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</table>
THE IMPACT OF THE ROSEMONT MINE ON THE ECONOMY OF ARIZONA

Total Impact

The economy of Arizona will benefit by an average of almost $488 million per year as a result of the combined direct and indirect contributions of the Augusta Resource Corporation’s Rosemont Mine to personal income, business sales, and government revenues in the state. That benefit represents the average annual impact on the state’s economy during the 19 years the Project is expected to be in actual production. The total economic benefit will also include the direct and indirect creation of 2,950 new jobs for Arizonans.

The greatest benefit from the contributions of the Rosemont Mine to the economy of Arizona will go to the state’s business community. The total of more than $312 million in sales that will be realized each year by businesses in the state directly and indirectly as a result of the new mine will comprise almost two thirds of the facility’s total economic impact on the state.

Individual residents of Arizona also will gain a substantial amount of personal income as a result of the operation of the Rosemont mine and plant. The total of more than $126 million in personal income to be received each year by residents of Arizona both directly and indirectly from the Rosemont operations will represent about a fourth of the project’s total contribution to the state’s economy.

State, county, municipal, school district, community college; and other local governments in Arizona also will share in the economic benefit generated by the Rosemont Mine. The new copper producing operations in Pima County will increase the annual revenues received by state and local government units throughout the state by almost $49 million.

The total impact of the Rosemont Mine on the economy of Arizona will be the result of the direct spending by Augusta Resource Corporation for payrolls, purchases of goods and services, and taxes, combined with the indirect increases caused by the circulation through the state’s economy of the money provided by those direct payments. That circulation of direct impact dollars will create a multiplier or ripple effect that will make the combined direct and indirect impact of the Rosemont Mine on the state more than double the direct impact alone, as shown in Table 3.

Direct Impact

The average direct contribution of the Rosemont Mine to Arizona’s economy during each year of production will total almost $224 million in direct payments to its employees, suppliers of products and services, and state and local tax collectors. The total will be distributed as shown in Table 4.

The largest share (73%) of the average annual direct contribution of the Rosemont Mine to the economy of Arizona during the 19-year productive life of the mine will go to business firms throughout the state. The more than $163 million to be paid directly to the Arizona business community each year will go to pay for a variety of products and services to be used in the new copper production
operations. By far the biggest portion ($60 million) will go to Arizona wholesale firms for a variety of products. A smaller but still substantial amount ($42 million) will go to buy electrical energy and other services from Arizona public utilities. Almost $25 million will be paid to Arizona manufacturers of a variety of products used in operating the Rosemont mine and plant. An average of over $15 million will be paid each year to construction contractors, and more than $7 million will be paid to other mining firms for contract mining operations. Another $7 million will go to firms providing a variety of business, professional, and repair services. More than $5 million will go to firms providing transportation services for the new project. Much smaller amounts will be paid to firms in the finance, insurance, and real estate industry, communications, retail trade, and agriculture.

A much smaller share (13%) of the direct contribution of the Rosemont mine and plant to the economy of Arizona during an average year of operation will go to Augusta Resource Corporation employees who are residents of the state. A total of more than $29 million in personal income will be provided each year directly to the approximately 500 employees at the new mine and plant.

State and local government units in Arizona will receive even more than the new mine's employees. The average of more than $31 million to be paid each year in state and local government taxes and fees by Augusta Resource Corporation as a result of the operations of the Rosemont Mine will represent 14% of the enterprise's direct contribution to the Arizona economy.

Part of that $31 million tribute to state and local government will be paid in the form of severance taxes paid on the new copper production from the Rosemont mine and plant. Most will come from property taxes on the project's plant, equipment, and orebody and from state sales taxes paid on some of the purchases of products and services made in Arizona for the new copper producing operation.

The largest share (over $13 million or 42%) of the new direct tax payments from the Rosemont Mine operations will go to the State of Arizona. The second biggest share (over $7 million or 23%) will go to school districts throughout the state. Another 20% (over $6 million) will go to Arizona's 15 county governments, and about 14% will go to cities and towns throughout the state. The remainder of more than $400,000 will go to the Pima Community College District and other local government units that serve Pima County.

The estimated contribution to state and local governments in Arizona assumes no reduction in effective property tax rates below those in effect in 2006 and an increase in state and local government spending as a result of the increased revenues. If, however, local government spending is held constant, and the increase in assessed property valuations created by the opening of the Rosemont mine and plant results in a decrease in property tax rates, then the direct contribution to government revenues through the property tax will be somewhat less than under the existing property tax rates. The difference would represent an effective tax reduction for other owners of residential and commercial property, and thereby a positive, though passive, impact on the state's economy from the Rosemont operation.

Indirect Impact

The full economic impact of the Rosemont Mine on the Arizona economy...
# Table 3

## THE COMBINED DIRECT AND INDIRECT IMPACTS OF THE ROSEMONT MINE ON THE ECONOMY OF ARIZONA

During its 19 years of production, the Rosemont Mine will have an average annual

**DIRECT IMPACT ON THE ARIZONA ECONOMY OF:** \( \text{$223,973,000$} \)

including direct contributions to:

- Personal income of \( \text{$29,450,000$} \)
- Business sales of \( \text{$163,197,000$} \)
- State and local government revenues of \( \text{$31,326,000$} \)

which, because of the circulation and recirculation of income through the Arizona economy, will result in an:

**INDIRECT IMPACT ON THE STATE’S ECONOMY OF:** \( \text{$263,543,000$} \)

including indirect gains in:

- Personal income of \( \text{$96,748,000$} \)
- Business sales of \( \text{$149,339,000$} \)
- State and local government revenues of \( \text{$17,456,000$} \)


to create a:

**COMBINED IMPACT ON THE ARIZONA ECONOMY OF:** \( \text{$487,516,000$} \)

including combined direct and indirect gains in:

- Personal income of \( \text{$126,198,000$} \)
- Business sales of \( \text{$312,536,000$} \)
- State and local government revenues of \( \text{$48,782,000$} \)

Total jobs gained directly and indirectly \( \text{2,950} \)

Average number of jobs gained directly \( \text{500} \)

*Source: Western Economic Analysis Center*
Table 4
THE DIRECT IMPACTS
OF THE ROSEMONT MINE
ON THE ECONOMY OF ARIZONA

During each of its 19 years of production, the Rosemont Mine will provide directly an average annual total of:

PERSONAL INCOME FOR RESIDENTS OF ARIZONA OF $29,450,000

and:

SALES REVENUES FOR ARIZONA BUSINESSES OF $163,197,000

including sales to the enterprise by:

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<thead>
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<tbody>
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<td>Wholesalers</td>
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<tr>
<td>Public utilities</td>
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<td>Manufacturers</td>
<td>$24,379,000</td>
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<td>Construction contractors</td>
<td>$15,313,000</td>
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<td>Other mining firms</td>
<td>$7,176,000</td>
</tr>
<tr>
<td>Service businesses</td>
<td>$7,102,000</td>
</tr>
<tr>
<td>Transportation firms</td>
<td>$5,539,000</td>
</tr>
<tr>
<td>All other businesses</td>
<td>$2,281,000</td>
</tr>
</tbody>
</table>

and:

STATE AND LOCAL GOVERNMENT REVENUES OF $31,326,000

including amounts paid directly to:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
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<tr>
<td>The State of Arizona</td>
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</tr>
<tr>
<td>Public schools</td>
<td>$7,116,000</td>
</tr>
<tr>
<td>County governments</td>
<td>$6,214,000</td>
</tr>
<tr>
<td>Community colleges</td>
<td>$371,000</td>
</tr>
<tr>
<td>Municipalities</td>
<td>$4,312,000</td>
</tr>
<tr>
<td>Other local governments</td>
<td>$62,000</td>
</tr>
</tbody>
</table>

to create a:

TOTAL DIRECT IMPACT ON THE ARIZONA ECONOMY OF $223,973,000

Source: Western Economic Analysis Center
Economic Impacts of the Rosemont Mine

will not be limited, of course, to the direct contributions made by the new copper production facility to personal, business, and government income through the Augusta Resource Corporation's own payrolls, purchases, and tax payments. The money received directly by the company's employees and suppliers and by state and local tax collectors will circulate and recirculate within the Arizona economy before being dissipated through leakages or outflows from Arizona to other states and nations. The ripple or multiplier effect so created by that money circulation will expand the average annual direct impact of nearly $224 million shown in Table 4 by more than twice to a total yearly impact on the Arizona economy of nearly $488 million, as shown in Table 3. The way in which almost $264 million of indirect income will be created and added to the mine's direct contributions to the Arizona economy is shown in the Combined Impact Matrix presented on page 22.

Much of the indirect income that will be generated by the circulation and recirculation of the direct income contributed by the Rosemont Mine will accrue to Maricopa and Pima counties. This will be partly the result of the roles played by the Phoenix and Tucson metropolitan areas as regional trade and service centers and by the Arizona tax structure, which serves to redistribute sales, severance tax, and corporate income tax revenues collected from enterprises in the mining areas to those counties, municipalities, and school districts with the largest populations. Nearly half of the indirect personal, business, and government income to be provided by the Rosemont Mine will be received by persons, business firms, and government units located in Maricopa County. About 40% will be gained by persons, businesses, and governments in Pima county. The remaining 10% will be received by persons, businesses, and governments in several other Arizona counties.
THE IMPACT OF THE ROSEMONT PROJECT
ON THE ECONOMY OF THE UNITED STATES

Total Impact

The economy of the United States will benefit by more than $2.3 billion per year as a result of the combined direct and indirect contributions of the Augusta Resource Corporation’s Rosemont Mine to personal income, business sales, and government revenues in the nation. That amount represents the average annual impact on the nation’s economy during the 19 years the mine is expected to be in actual production. Nearly 80% of that total economic benefit will be realized by individuals, businesses, and government units outside of Arizona.

The greatest benefit from the contributions of the Rosemont Mine to the economy of the United States will be received by the nation’s business community. The total of more than $1.5 billion in sales that will be realized each year by businesses in the United States directly and indirectly as a result of the Rosemont Mine will comprise nearly two thirds of the new facility’s total economic impact on the nation. Only one fifth of that $1.4 billion total will be received by business firms in Arizona, with most of the nearly 80% balance going to businesses in more populous states, including California and Texas and others in the Midwest and Northeast.

Individual Americans also will gain a substantial amount of personal income as a result of the operation of the Rosemont mine and plant. The average of nearly $520 million in personal income to be received each year by residents of the United States both directly and indirectly from the Rosemont Mine during its 19 years of productive life will represent 22% of the mine’s total annual contribution to the national economy. Nearly three fourths of that $520 million will be received by persons living outside of Arizona.

State, county, municipal, school district, community college, and other state and local governments throughout the United States also will share in the economic gain generated by the Rosemont Mine. The new copper producing operations in Arizona will generate an average of almost $132 million of the revenues received annually by state and local governments in Arizona and other states during the 19-year productive life of the project. Almost two-thirds of that amount will be received by state and local government units outside of Arizona.

The Federal Government of the United States also will share in the economic gain generated by the Rosemont Mine. The new copper producing operations in Arizona will increase the annual revenues received by the Federal Government by an average of almost $164 million for each of the 19 years that the project will be producing copper. That will be more than three times as much as state and local governments in Arizona will get.

The total impact of the Rosemont Mine on the economy of the United States will be the result of the direct spending by Augusta Resource Corporation for payrolls, purchases of goods and services, taxes, and government fees, combined with the indirect incomes caused by the circulation through the national economy of the money provided by those direct payments. That circulation of direct
impact dollars will create a multiplier or ripple effect that will make the combined direct and indirect impact of the Rosemont Mine on the country that will be more than seven times the direct impact alone, as shown in Table 5. About 80% of that total annual economic benefit will be realized by persons, businesses, and governments located outside of Arizona.

**Direct Impact**

The direct economic impact of the Rosemont Mine on the United States during each of the 19 years of the project’s anticipated productive life will average over $327 million in direct payments to employees, suppliers of products and services, and tax collectors. The total will be distributed as shown in Table 6.

The major share (71%) of the direct contribution of the Rosemont Mine to the economy of the United States during an average year of production will go to the nation’s business firms that will supply products and services directly to Augusta Resource Corporation for use in the new copper producing operations. The $231 million to be paid directly to the American business community each year will go to pay for a variety of products and services to be used in the new copper production operations. By far the biggest portion ($101 million) will go to the wholesalers of the many items of industrial equipment and supplies used each year in producing copper at the new mine and plant. The second biggest share ($42 million) will buy electrical energy and other services from public utilities, and a little more than $41 million will go directly to manufacturers of a wide variety of products to be used in the project’s operations.

An average of more than $15 million will be paid each year to construction contractors for work at the Rosemont Mine site. A smaller amount ($12 million) will go to firms providing a range of business, professional, and repair services, while transportation firms will get about $9 million for moving goods and people to and from the Rosemont Mine site. Over $7 million will go to other mining firms for contract mining operations at the Rosemont Mine. The remaining $3 million will go to firms in a number of industries providing both products and services for the new facility. About 30% of the payments made directly to American business firms each year by Augusta Resource Corporation for the Rosemont Mine operations will go to firms outside of Arizona.

Augusta Resource Corporation employees who work to produce copper at the Rosemont mine and plant also will share significantly in the direct impact of the new facility on the economy of the United States. The more than $29 million in personal income provided directly to those workers at the Rosemont operations will form 9% of the enterprise’s direct annual contribution to the economy of the United States.

State and local governments in Arizona also will receive significant amounts directly from Augusta Resource Corporation as a result of the operations of the Rosemont Mine. The more than $31 million in taxes and fees paid directly to state and local government units each year as a result of the production from the Rosemont mine and plant will make up nearly 10% of the mine’s direct impact on the nation’s economy.

The Federal Government will receive a little more than Arizona’s state and local governments directly from the Rosemont Mine. During the 19-year productive life of the mine, the Federal Government will get an average of more than $35 million annually in mostly corporate income taxes and payroll
The combined direct and indirect impacts of the Rosemont Mine on the economy of the United States

During its 19 years of production, the Rosemont Mine will have an average annual direct impact on the United States economy of $327,198,000, including direct contributions to:

- Personal income of $29,450,000
- Business sales of $231,137,000
- State and local government revenues of $31,326,000
- Federal government revenues of $35,285,000

The combination of these direct impacts will result in an indirect impact on the nation's economy of $2,027,236,000, including indirect gains in:

- Personal income of $490,380,000
- Business sales of $1,308,142,000
- State and local government revenues of $100,403,000
- Federal government revenues of $128,311,000

These combined direct and indirect impacts will create a combined impact on the nation's economy of $2,354,434,000, including combined direct and indirect gains in:

- Personal income of $519,830,000
- Business sales of $1,539,279,000
- State and local government revenues of $131,729,000
- Federal government revenues of $163,596,000

Total jobs gained directly and indirectly: 11,280
Average number of jobs gained directly: 500

Source: Western Economic Analysis Center
### Table 6

**THE DIRECT IMPACTS OF THE ROSEMONT MINE ON THE ECONOMY OF THE UNITED STATES**

During each of its 19 years of production, the Rosemont Mine will provide directly an average annual total of:

**PERSONAL INCOME FOR AMERICAN WORKERS OF:** $29,450,000

and:

**SALES REVENUES FOR OTHER AMERICAN BUSINESSES OF:** $231,137,000

including sales to the enterprise by:
- Wholesalers of: $100,944,000
- Public utilities of: $41,799,000
- Manufacturers of: $41,285,000
- Construction contractors of: $15,313,000
- Service businesses of: $12,027,000
- Transportation firms of: $9,380,000
- Other mining firms of: $7,176,000
- All other businesses of: $3,213,000

and:

**STATE AND LOCAL GOVERNMENT REVENUES OF:** $31,326,000

including amounts paid directly to:
- Arizona state government of: $13,251,000
- Public schools and colleges of: $7,487,000
- County government of: $6,214,000
- Municipal and other governments of: $4,374,000

and:

**FEDERAL GOVERNMENT REVENUES OF:** $35,285,000

for a total direct impact on the nation's economy of:

**TOTAL DIRECT IMPACT ON THE NATION'S ECONOMY OF:** $327,198,000

*Source: Western Economic Analysis Center*
taxes as a result of the operations of the Rosemont Mine. That amount of federal corporate income tax is based on expected copper price and cost relationships projected over the mine's productive life.

All levels of government, federal, state, and local, will realize a net of more than $66 million per year directly from the Rosemont Mine under the expected market price and cost conditions. The government's average share during the 19-year productive life of the mine will amount to more than 20% of the new facility's direct impact on the nation's economy. That will be more than double the share received by the facility's workers.

Indirect Impacts

The full economic impact of the Rosemont Mine on the economy of the United States will not be limited, of course, to the direct contributions made as a result of the new production to personal, business, and government income through Augusta Resource Corporation's own payrolls, purchases, and taxes. The money received directly by the company's employees and suppliers and by federal, state, and local tax collectors will circulate and recirculate within the national economy before being dissipated through leakages or outflows from the United States to other countries. The ripple or multiplier effect so created by that money circulation will expand the direct annual impact of more than $327 million shown in Table 6 to a total yearly impact on the American economy of more than $2.3 billion, as shown in Table 5. The way in which over $2 billion of indirect income will be created by the Rosemont Mine's direct contributions is shown in the Combined Impact Matrix presented on page 23 in the Methodology Appendix.

Some of the indirect income that will be generated by the circulation and recirculation of the direct income contributed by the Rosemont Mine to the economy of the United States will accrue to the economy of Arizona, but most (87%) will accrue to the economies of other states. More than 80% of the personal income generated indirectly in the American economy by the Rosemont Mine will go to persons outside of Arizona. An even bigger percentage (89%) of the business sales generated indirectly by the new mine and plant will be realized by business firms located in states other than Arizona. Over 92% of the federal, state, and local government revenues generated indirectly by the Rosemont Mine will go to government units outside of Arizona. About 60% of that share (56% of the total) will go to the Federal Government.
METHODOLOGY

Direct Economic Impact

The direct impact of any economic activity on any local, state, or national economy can be measured in terms of that activity’s direct contributions to: (1) the personal income of the residents of that affected area; (2) the sales of other businesses operating in the affected area; and (3) the revenues of those governments with jurisdiction completely within the affected area.

Where the economic activity being examined is a new business enterprise, such as the planned Rosemont Mine of the Augusta Resource Corporation, then the new enterprise’s direct contributions to the local, state, or national economy’s personal income consists of the payments of wages and salaries and other cash benefits, such as pensions, to employees and former employees who are residents of the affected locality, state, or nation. In the case of the Rosemont Mine, direct contributions to personal income are considered to be only the payments of wages and salaries to employees hired as a result of the production operations of the new enterprise.

The direct contributions to the incomes of other businesses include the purchases by the firm of equipment, materials, energy, and services from other business firms for use in the development and operation of the new copper production facility. The direct contributions to local, state, and federal government revenues include all taxes, fees, and other payments to the relevant governments by the corporation as a result of the operation of the new facility.

Indirect Economic Impacts

Direct income flows, such as payrolls, purchases, and taxes, circulate and recirculate within local, state, and national economies. That circulation and recirculation creates additional indirect income for the residents, businesses, and governments in those areas. Such indirect incomes usually affect not only those households, business firms, and government units that receive direct payments from the enterprise being studied, but also many who do not receive any such direct payments. The amount of such indirect income must be considered in evaluating the full economic impact of an enterprise such as the Augusta Resource Corporation or the creation of a new unit of that firm, such as the Rosemont Mine.

For example, the wages and salaries paid by copper mining firms to their employees are used by those employees to buy food, clothing, housing, energy, automobiles, services, and a variety of other consumer goods from local, state, and national businesses, as well as from firms outside of the United States. Those firms then pay their employees, creating more personal income that is an indirect consequence of the direct payrolls of the metal mining enterprise. Those employees of those businesses then make similar purchases of products and services from local, state, or national businesses, creating even more indirect business income. Such payments made to entities outside of the relevant locality, state, or nation represent leakages or outflows from the economy and serve to diminish the amount of indirect income created.
Similarly, the taxes paid to local, state, and federal government units are used to pay teachers, law enforcement personnel, and other government workers, who in turn buy food, clothing, housing, and other consumer products and services. They also pay additional local, state, and federal taxes.

As the circulation and recirculation of direct income takes place, it multiplies the total impact of the enterprise's direct payments for payrolls, purchases, and taxes. Following this flow of income through the local, state, or national economy by means of an impact dispersion network allows the computation of appropriate income multipliers for each of the three (four, when federal revenues are separated from state and local government revenues) general types of income.

The application of those income multipliers to the direct incomes yields an estimate of the indirect income generated as a result of the direct income contributions to the economy.

In analyzing the indirect impacts of the Rosemont Mine on the economy of the United States, Arizona, and Pima County, the indirect incomes resulting from the circulation and multiplication of the direct income impacts were calculated using the appropriate income multipliers. These calculations involved use of three-sector and four-sector combined impact matrices derived from separate impact dispersion networks, i.e., one each for personal income, business sales, state and local government revenues, and federal government revenues. The Arizona and Pima County impacts were developed using three-sector combined impact matrices, with federal government revenues considered to be an initial leakage from the county and state.

**Combined Economic Impact**

The combined economic impact of any basic (i.e., money-importing or new value creating) enterprise, such as the Rosemont Mine, on a local, state, or national economy then is calculated as the simple arithmetic sum of the direct and indirect impacts. It is always larger than the direct impact alone. Where the local, state, or national economy is large and diverse, the income leakages tend to be small and the combined economic impact of a single enterprise is frequently much larger than the direct impact alone. Where the local or state economy is not large or diverse, however, then the income leakages tend to be larger and the combined direct and indirect impact of the enterprise is not so large. Nevertheless, even under such conditions, the combined direct and indirect impact is usually significantly greater than the direct impact alone.
## Economic Impacts of the Rosemont Mine

### Combined Impact Matrix

Direct and indirect impact of
THE ROSEMONT MINE
on the economy of
ARIZONA
in
AVERAGE YEAR OF PRODUCTION

**Impacts (amounts in dollars)**

<table>
<thead>
<tr>
<th></th>
<th>DIRECT IMPACT</th>
<th>INDIRECT ECONOMIC IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PERSONAL</td>
<td>BUSINESS</td>
</tr>
<tr>
<td>PERSONAL</td>
<td>29,450,000</td>
<td>11,339,986</td>
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<tr>
<td>BUSINESS</td>
<td>163,197,000</td>
<td>63,287,578</td>
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<tr>
<td>GOVERNMENT</td>
<td>31,326,000</td>
<td>22,120,253</td>
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<tr>
<td>TOTAL DIRECT</td>
<td>223,973,000</td>
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</tr>
<tr>
<td>TOTAL INDIRECT</td>
<td>263,543,039</td>
<td>96,747,817</td>
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<tr>
<td>COMBINED</td>
<td>487,516,039</td>
<td>126,197,817</td>
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### Multipliers

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<tr>
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<th>PERSONAL</th>
<th>BUSINESS</th>
<th>GOVERNMENT</th>
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<tbody>
<tr>
<td>PERSONAL INCOME</td>
<td>0.3851</td>
<td>1.2768</td>
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<tr>
<td>BUSINESS INCOME</td>
<td>0.3878</td>
<td>0.5101</td>
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<tr>
<td>GOVERNMENT REVENUES</td>
<td>0.7061</td>
<td>0.9094</td>
<td>0.0817</td>
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</table>
### COMBINED IMPACT MATRIX

Direct and indirect impact of
THE ROSEMONT MINE
on the economy of
THE UNITED STATES
in
AN AVERAGE YEAR OF PRODUCTION

**IMPACTS (amounts in dollars)**

<table>
<thead>
<tr>
<th></th>
<th>DIRECT IMPACT</th>
<th>INDIRECT ECONOMIC IMPACT</th>
<th>PERSONAL</th>
<th>BUSINESS</th>
<th>ST &amp; LOC GOV</th>
<th>FED GOV</th>
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</thead>
<tbody>
<tr>
<td>PERSONAL</td>
<td>29,450,000</td>
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<td>131,308,872</td>
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<td>FEDERAL GOVERNMENT</td>
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<td>66,730,904</td>
<td>141,615,063</td>
<td>15,256,443</td>
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<td>TOTAL DIRECT</td>
<td>327,198,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>TOTAL INDIRECT</td>
<td>2,027,235,984</td>
<td>490,379,966</td>
<td>1,308,142,110</td>
<td>100,402,820</td>
<td>128,311,088</td>
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<td>COMBINED</td>
<td>2,354,433,984</td>
<td>519,829,966</td>
<td>1,539,279,110</td>
<td>131,728,820</td>
<td>163,596,086</td>
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**MULTIPLIERS**

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<th>BUSINESS</th>
<th>ST &amp; LOC GOV</th>
<th>FED GOV</th>
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<td>FEDERAL GOVERNMENT REVENUES</td>
<td>1.8912</td>
<td>4.0135</td>
<td>0.4324</td>
<td>0.4166</td>
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