ENVIRONMENTAL AND SOCIAL PERFORMANCE ANNUAL MONITORING REPORT (AMR)

MONTANA EXPLORADORA DE GUATEMALA, S. A. MARLIN MINE

REPORTING PERIOD: 2008

AMR COMPLETION DATE: MAY 1, 2009

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GEOCHEMICAL TESTING RESULTS

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ACRONYMS AND ABBREVIATIONS

ABA Acid Base Accounting

ACODIHUE La Asociación de Cooperación al Desarrollo Integral de Huehuetenango

AG Acid Generating

ag Silver

AGP Acid Generation Potential

AMAC Asociación de Monitoreo Ambiental Comunitario

AMM Administrator of Wholesale Markets

AMR Annual Monitoring Report
ANP Acid Neutralizing Potential

APROSAMI Asociación de Promotores de Salud de San Miguel Ixtahuacán

AQ Air Quality AQV family planning

As Arsenic

ASDECAFMU San Miguel Ixtahuacán and Sipacapa Coffee Producers Organization

ASOREMA Association of Guatemalan Environmental NGOs ASOTRAMÓN Asociación Solidarista de Trabajadores de Montana

au Gold

CADEC Community Advisory Councils

CAP Centro de Atención Pemanente (Municipal Health Care Center)

Cd Cadmium

CDC Citizens Development Corps
CIEG Army Corps of Engineers

CN Cyanide

CO Carbon Monoxide CO₂ Carbon Dioxide

COCODE Community Development Council
Code International Cyanide Code
CODI Guatemalan Health Care NGO

Com Community

COMUDE Municipal Development Council

Cont. Contents

CPI Critical Performance Indicator

Cu Copper CuM Cubic Meters

CTA Consultoria y Tecnologia Ambiental, S.A.
CTAs Technical Administrative Coordinators

dB decibel

DGAC General Directorate of Civil Aeronautics

DGE Dirección General de Energía

DGH Dirección General de Hidrocarburos

DPM Diesel Particulate Matter ECO Guatemalan Health Care NGO

EIA&S Environmental and Social Impact Study

EKG Electrocardiogram

EMP Environmental Management Plan EMS Environmental Management System

Env Environmental EOY End of Year

EPA Environmental Protection Agency (United States)

ETCEE Agency for Transport and Control of Electric Energy

FAFIDESS Fundación de Asesoría Financiera a Instituciones de Desarrollo y Servicio Social

Fe Iron

FSM Fundación Sierra Madre

FUNSIN Foundation for the Advancement of Engineering

g/t Grams per Ton

GETSA Gestión y Tecnología en Salud

Gpt Grams per tonne

GUAPA Guatemala Poverty Assessment Program
ICDP Integrated Community Development Program

IFC International Finance Corporation

IGSS Social Security Tax

INAB Instituto Nacional del Bosque

INCO/SO₂ Inco So₂ Air Cyanide Removal Process

In situ In Place

INTECAP Instituto Técnico de Capacitación y Productividad

INTERVIDA US Humanitarian Aid NGO

IRTRA Instituto de Recreación de Trabajadores de la Empresa Privada de Guatemala

IUSI Property Tax IVA Value Added Tax

LECO Geochemical induction furnace manufacturer

L/s Liters per second

m Meters

MARN Ministry of the Environment and Natural Resources

MDN Ministry of Defense

MEM Ministry of Energy and Mines MFI Micro-Finance Institution

MODU Marlin Organizational Development Unit Montana Exploradora de Guatemala, S. A.

MSHA Mine Safety and Health Administration (United States)

MSME Micro, Small and Medium Enterprises

MSPAS Ministry of Public Health and Social Assistance

MW Ground Water Monitoring Well

NAG Non Acid Generating

ND No Data Ni Nickel

NGO Non Governmental Organization

No. Number O₂ Oxygen

OH&S Occupational Health and Safety

OP Operating Principles

OSHA Occupational Safety and Health Administration (United States)

PAG Potentially Acid Generating

PAP Pap Smear

PCDP Public Consultation and Disclosure Program

PCS Petroleum Contaminated Soil

PIDEC Comprehensive Community Development Program

PM₁₀ Particulate Matter with an Aerodynamic Diameter Less Than 10 Microns

ppm Parts per Million

PRODEC Proyecto Desarrollo Comunitario

PRONADE Guatemalan Community-Managed Program for Educational Development

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Q Quetzales Res Resolution

SAG Semi Autogenous Grinding

SGS SGS Group (Environmental Services Company)
SDMP Sustainable Development Management Plan

SDMS Social/Sustainable Development Management System

SO₂ Sulfur Dioxide Sus Sustainable SW Surface Water

TLV-TWA Threshold Limit Value-Time Weighted Average

TPH Total Petroleum Hydrocarbons
TSF Tailings Storage Facility
US\$ United States Dollars

USG Ultrasound

WAD CN Weak Acid Dissociable Cyanide

WAD Weak Acid Dissociable

Zn Zinc

1.0 INTRODUCTION AND BACKGROUND

This 2008 Annual Monitoring Report (AMR) has been prepared to confirm compliance of the Marlin Mine with the applicable Guatemalan requirements and the Environmental and Social Impact Study approved for the mine. The AMR has been prepared in accordance with International Finance Corporation/Equator Principle environmental guidelines and social policies. Montana Exploradora de Guatemala, S. A. (Montana) has contracted for preparation of AMRs since the mine was under construction in 2004; at first for compliance with the provisions of the company's IFC loan, and on a voluntary basis since 2006 when the loan was repaid. Every AMR has been made available to the public as a method for communicating with stakeholders and promoting transparency. Specific components of the AMR include the following:

- A detailed description of all significant health & safety, environmental, social and community development activities and events that occurred during the reporting period.
- Provision of additional information about activities (i.e., status of permits or other approvals, ongoing public consultation during operations, sustainable development initiatives, etc.).
- Quantitative performance monitoring data summaries in comparison to appropriate national requirements and international guidelines.
- An explanation of any cases of non-compliance with national requirements and international guidelines or applicable regulatory limits that have occurred, identifying the cause and the corresponding corrective measures planned or underway to prevent future occurrences.

1.1 Annual Monitoring Report Certification

Montana Exploradora de Guatemala, S. A. 5a Avenida 5-555, Zona 14 Torre I, Nivel 6, Oficina 601 Guatemala, Guatemala Telephone: 502 2329-2600

The 2008 AMR for the Marlin Mine was prepared by Blankenship Consulting LLC, an independent consulting firm. The social portions were based on information provided by Montana Exploradora de Guatemala, S.A. and Fundación Sierra Madre. The environmental sections were prepared from information provided by Montana and the conclusions were reviewed by Consultoría y Tecnología Ambiental, S.A., an independent environmental consulting firm. Information about the activities of Asociación de Monitoreo Ambiental Comunitario, was provided by Avanzar, an independent consulting firm that provides facilitation services to AMAC. Health and safety sections of the report were prepared from information provided by Marlin Mine Industrial Security and Health staff.

The undersigned certify that the data contained in this AMR completely and accurately represent environmental and social issues for the Marlin Mine during this reporting period and further certify that analytical data summaries incorporated into this report are based upon data collected and analyzed in a manner consistent with the World Bank Group's Pollution Prevention and Abatement Handbook, Monitoring.

Montana Exploradora de Guatemala, S. A.

Milth<u>n Estuardo</u> Saravia

Blankenship Consulting LLC George Blankenship

Consultoria y Tecnología Ambiental, S. A. Dr.- Ing. Adrián Juárez Pineda

April 24, 200 9 Signature/Date

2.0 MINE STATUS

The Marlin Mine was commissioned in 2005; 2008 was the third full year of commercial production.

2.1 Mining

Mining activities occurred at both surface and underground mining locations during 2008.

Surface Mine

A total of 7,113,038 tonnes of material was mined by the surface mine fleet during 2008; 1,700,034 tonnes were ore, at an average grade of 2.57 grams per ton (g/t) vs. compared with 2.13 g/t budgeted grade. Additionally, 5,413,004 tonnes of waste material were mined from the Marlin Pit, and of that total:

- 771,311 tonnes of non-production rock were mined for construction purposes,
- 561,578 tonnes were classified as PAG and encapsulated within the waste dump, and
- 39,737 tonnes were stockpiled.

Table 1 summarizes the material movement from the pit during 2008.

Table 1. Marlin Mine 2008 Surface Mine Production & Material Movement							
Actual Plan Varia							
Ore Tonnes Mined	1,700,034	1,154,370	545,664				
Grade Au (g/t)	2.57	2.13	0.44				
Grade Ag (g/t)	40.5	34.0	6.5				
Contained Oz. Au.	140,212	78,903	61,309				
Contained Oz. Ag	2,213,358	1,262,692	950,666				
Waste Tonnes Mined 5,413,004 3,552,818 1,860							
Total Material Movement	7,113,038	4,707,188	2,405,850				

Underground

As shown in Table 2, a total of 553,515 tonnes of ore were mined from the underground mine, with an average gold grade of 9.70 g/t and 218.2 g/t of silver. A total of 287,601 tonnes of waste were also mined in 2008 and 102,394 cubic meters of backfill placed in mined-out stopes. Advance in lineal meters in ore was 5,321 meters and 4,230 lineal meters in waste.

Table 2. Marlin Mine 2008 Underground Production & Material Movement							
	Actual	Plan	Variance				
Ore (Tonnes)	553,515	476,382	77,133				
Au (g/t)	9.70	9.68	0.02				
Ag (g/t)	218.2	240.2	(22.0)				
Contained Oz. Au	172,564	148,242	24,322				
Contained Oz. Ag	3,883,658	3,678,970	204,689				
Waste (Tonnes)	287,601	400,619	(113,017)				
Ore Advance (m)	5,321	8,978	(3,657)				
Waste Advance (m)	4,230	6,359	(2,129)				
Backfill (m ³)	102,394	160,685	(58,290)				
Total Material Movement	841,116	877,001	(33,885)				

2.2 Production

- A total of 1,844,914 tonnes of ore were processed during 2008, at an average gold grade of 4.54 g/t and 89.58 g/t of silver.
- A total of 241,367 ounces of gold and 3,212,594 ounces of silver were produced during the year.

2.3 Reserves

Table 3 displays 2007 end of year (EOY) proven and probable reserve data for the Marlin Mine, the depletion of those reserves due to mining during 2008 and the additions to reserves associated with 2008 exploration activities. Exploration activities during 2008 replaced about 50 percent of proven and probable gold reserves mined during the year and about 53 percent of proven and probable silver reserves.

Table 3. Marlin Mine 2008 Reserve Status							
	Tonnes	Gold Grade (gpt)	Gold (ounces)	Silver Grade (gpt)	Silver (ounces)		
2007 EOY Proven & Probable Reserves	15,561,362	4.50	2,251,372	112.5	56,267,011		
2008 Mining Depletion	1,844,931	4.56	270,481	89.6	5,314,112		
2008 Exploration Additions	1,084,001	3.88	135,294	641.6	2,790,750		
2008 EOY Proven & Probable Reserves	14,800,432	4.45	2,116,186	112.9	53,743,650		

2.4 Ongoing Construction

A variety of improvements and expansions of mining and processing facilities were accomplished during 2008. Major new facilities include the following:

- Construction of Phase 3a of the tailings storage facility (TSF) continued throughout 2008. Some minor design changes were made to raise the final dam elevation to the 1962m elevation, to increase both tailings and water storage capacity.
- Construction of a secondary water treatment plant was undertaken in 2008 to treat future discharge water from the tailings storage facility (TSF) to the environment to guarantee compliance with both MARN standards and IFC guidelines for mining effluent. This plant is operational and has been tested by treating and recirculating solution to the tailings impoundment. The secondary water treatment plant is in addition to the INCO/SO₂ treatment plant and will be used to provide a polishing level of treatment prior to any future discharge of TSF water to the environment.
- Relocation of a portion of the transmission line that supplies electric power to the mine.
- A variety of smaller internal construction in projects were completed during 2008 including
 construction of a booster pump station for the raw water supply system; improvements to the
 materials handling system, construction of a new chemical storage facility and addition of
 worker's quarters, expansion of the dining hall, commissioning of a centrally located sewage
 treatment plant, and construction of a free-standing exercise room with increased capacity
 and additional fitness equipment at the worker's camp.

2.5 Exploration

During 2008, Montana continued drilling in areas of geological interest around the Marlin Mine. A total of 73 drill holes totaling 26,360 meters in depth were drilled on Montana-owned property and on third party private property adjoining the mine area with the objective of defining and expanding mineable ore reserves. The majority of the drilling was accomplished using Montana-owned man-portable Hydracore Gopher drills to minimize surface disturbance. These portable drills are hand carried to four-meter square drill sites, eliminating the need for access roads, minimizing drill-site disturbance and reducing reclamation times. Exploration drilling with man-portable rigs generates more local jobs than drilling with track or truck-mounted drills, averaging 30 to 40 jobs for local residents near exploration areas.

Outside of the company-owned land holdings, exploration holes were drilled in both the Agel area in the municipality of San Miguel Ixtahuacán, and the Cancil area of the municipality of Sipacapa. Drilling was carried out to test for subsurface occurrence of geologic features previously identified through geological mapping and soil and rock sampling in these areas.

In the Cancil area, eleven holes were drilled totaling 4,435 meters in depth during 2008. Six holes totaling 3,170 meters in depth were completed in the Agel area.

Exploration drilling in the Marlin Mine area included definition drilling along the western extension of the Marlin vein (20 drillholes totaling 7,781 meters in depth) and first-pass exploration in new areas of interest north and east of the Marlin installation (34 drillholes totaling 9,835 meters). As many of these drillholes were deeper than the limits of man-portable drills, two drills contracted through Rodio-Swissboring were utilized for this endeavor. For deep West Marlin holes a Christensen CS-1000 completed holes to a maximum depth of 673 meters. A Maxidrill Maxcat 1000 reverse circulation drill was used to drill shallow holes (to 300 meters) in areas north of the Marlin Mine where targets warranted a quicker more economic approach.

Montana follows a procedure respectful of private property when drilling on lands outside of company-owned property. Landowner permission is always obtained before exploration work commences on privately owned property, including sampling, mapping and construction of paths and drill platforms. When roads and platforms are required on privately owned property, the landowner is compensated based on the amount of land that is disturbed. Entry agreements with private land owners always include reclamation provisions, and local residents remain employed by Montana for several weeks following each drilling campaign to reclaim disturbance by recontouring drill sites, reseeding disturbed areas and planting trees.

In order to strengthen the relationship between the exploration department and the communities in which it operates, the department has contributed to some community development projects as outlined in Table 4. In addition to these projects, the Exploration Department has coordinated with the Marlin Mine Sustainable Development Department to work on community development projects in areas of interest.

Table 4. 2008 Marlin Exploration Community Development Projects								
Community	Cost Q.	Cost US\$1						
Aldea Pie de								
La Cuesta,								
Sipacapa	Donation of painting for the school	Q.3,116	\$402					
	Masonry and construction materials for the							
Aldea Cancil	Evangelical church	13,705	1,769					
TOTAL		Q.16,821	\$2,172					

Montana follows the practice of conducting information meetings and responding to community questions when carrying out exploration activities in areas of interest. During 2008 the Exploration Department continued with presentations informing local leaders and community residents, principally in the areas of immediate exploration interest.

Communities that received information presentations during 2008 included Los Chocoyos, Agua Caliente, Pie de la Cuesta, El Rincón, Cancil, Quecá, Las Minas, Nueva Esperanza, Quequesiguán and Los López in the municipality of Sipacapa and Tierra Blanca, Muvil and Agel in the municipality of San Miguel Ixtahuacán. These information meetings were complemented with tours of the Marlin Mine on many occasions.

2.6 Reforestation (Forest Incentives Program)

The Marlin Mine reforestation campaign is part of the Forestry Management Plan approved by the Guatemalan INAB (Instituto Nacional de Bosques). Reforestation was described in this Plan as compensation for the direct impact of tree cutting within the mine area footprint. The compensation requirement was to reforest 190 hectares; this requirement was completed during the first two years of the reforestation campaign, 2004 and 2005. Montana has continued reforesting between 5 and 20 hectares annually beyond the INAB requirements.

¹ December 31, 2008 exchange rate of Q.7.74573 = US\$1.00

While reforestation is a requirement under Guatemalan law, the *Incentivos Forestales* (reforestation incentives) program is a voluntary program initiated by Montana in agreement with INAB and in conformance with INAB's reforestation model to ensure that planted trees reach maturity. Under this program, private landowners are paid incentives for planting and caring for trees. The incentives are paid for five years. In addition to cash incentives, participating landowners receive technical assistance from the company for ground preparation, fertilizing, plague control and other ongoing tree care services for the first five years. After that period the landowner is responsible for the care of the trees and may manage them for potential benefit; i.e. managed harvesting for firewood.

The year 2008 was the fifth reforestation year and 6.97 hectares were reforested. During 2008 Montana paid private landowners Q.166,550 (US\$21,502) in forestry incentives. Since the inception of the *Incentivos Forestales* program, Montana has paid over Q.791,655 (US\$102,205) to a total of 135 families for planting and caring for trees on their land.

2.7 Employment

As of December of 2008, a total of 1,609² workers were employed by the Marlin Mine, about 40 percent more than the December 2007 total of 1,149. A total of 1,113 workers were employed directly by Montana and 496 workers were employed by mine contractors.

Figure 1 displays December 2008 Marlin Mine employment by employee place of residence at the time the employee was hired. During 2008, over 98 percent of all direct and contractor employees working at the Marlin Mine were Guatemalan residents and over 60 percent of the employees were from the two municipalities surrounding the mine (47 percent were from San Miguel Ixtahuacán and 14 percent were from Sipacapa). Most of the workers from San Miguel and Sipacapa were people of indigenous descent. Of the 1,113 direct Montana employees at the Marlin Mine in December 2008, 87 percent were men and 13 percent were women.

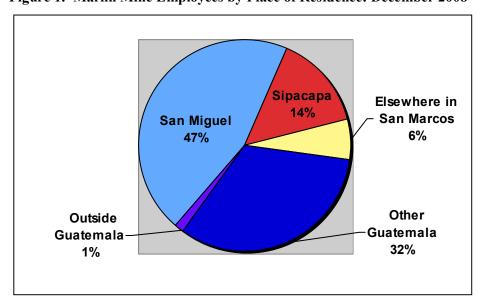


Figure 1. Marlin Mine Employees by Place of Residence: December 2008

² This includes 36 teachers in schools in communities near the mine whose salaries were paid by Montana.

Figure 2 displays Marlin Mine workforce by type of employment. During December of 2008, 69 percent of the Marlin Mine workforce worked directly for Montana and 31 percent were employed by contractors. Of the contractor employees, 100 percent were Guatemalans, and 46 percent were from San Miguel Ixtahuacàn and Sipacapa.

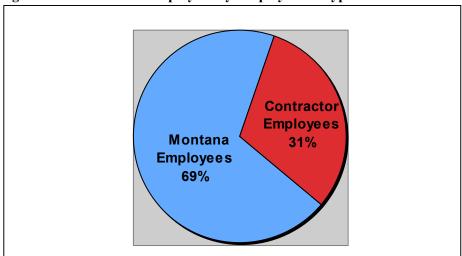


Figure 2. Marlin Mine Employees by Employment Type: December 2000

2.8 Payroll

The 2008 Marlin Mine payroll for both Montana direct and contractor employees totaled over Q.131 million (US\$16.9 million). Of the total payroll, 96% percent or over Q.125 million (US\$16.2 million) was paid to Guatemalan workers, including Q.42 million (US\$5.46 million) paid to workers from San Miguel Ixtahuacàn and Q.11.1 million (US\$1.4 million) paid to workers from Sipacapa (see Figure 4).

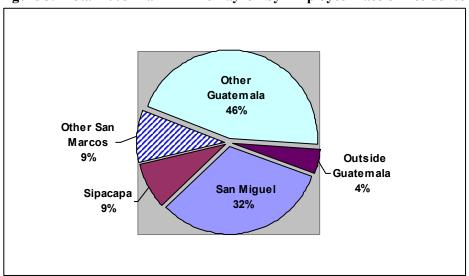


Figure 3. Total 2008 Marlin Mine Payroll by Employee Place of Residence*

*No salary distribution information provided by contractor Hergo, all Hergo salaries included as "Other Guatemala," although 23 workers lived in San Miguel, Sipacapa and elsewhere in San Marcos. No Hergo employees lived outside Guatemala.

2.9 Employee Benefits

Montana full-time employees receive the benefits listed below.

- Health insurance for employees and their families.
- Employees and their families can receive free health care treatment at the health clinic located at the mine site³.
- Life insurance
- Accidental death and dismemberment insurance.
- Overtime pay.
- 14th salary bonus: a bonus equal to one month's salary for employees that have worked a full year (prorated for those that have worked for less than one year).
- Christmas bonus: also a bonus equal to one month's salary for employees that have worked a full year (prorated for those that have worked for less than one year), calculated from December 1 through November 30.
- 15 days vacation/year.
- Social Security.
- IRTRA (Instituto de Recreación de Trabajadores de la Empresa Privada de Guatemala), an institution that provides recreation facilities for employees of private entities.
- Transportation is provided to and from the mine site daily from San Miguel Ixtahuacàn, Sipacapa, San José Nueva Esperanza, San Antonio, Máquivil, and Huehuetenango.
- Safety equipment: all Marlin Mine workers are provided with the safety equipment required for their particular job.
- Day Care Center: Marlin Mine mothers can leave their children (ages three months to three years) in a day care center at the mine while they work.
- Production bonus: during 2008 Montana initiated a production bonus system for all employees. The bonuses are paid monthly, are department specific and tied to performance in safety and compliance with environmental stewardship standards as well as production. Other determining factors include attendance and budget performance. Bonus values can amount to 25 percent of monthly salaries for employees at the lower end of the pay scale and decrease as a percentage of monthly pay for employees at the higher end of the pay scale.

2.10 Montana Employee's Solidarity Association

In November of 2005, the employees of Montana Exploradora de Guatemala, S.A formed the Asociación Solidarista de Trabajadores de Montana (ASOTRAMÓN), which seeks to improve the quality of life for Montana employees, their families and communities. The association provides long and short-term loans to members and promotes social, sporting and economic activities to strengthen relations of solidarity and goodwill between employees and the company.

ASOTRAMÓN has the following objectives:

- Stimulate employee savings
- Facilitate acquisition to credit.
- Provide access to basic goods at affordable prices

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³ Residents of communities near the mine also receive free health care at the clinic located at the mine site.

- Retirement planning
- To instill an entrepreneurial spirit

As of the end of 2008, ASOTRAMÓN had over 750 members, about 75 percent of all employees at the Marlin Mine and a 45 percent increase over the 2007 membership level.

ASOTRAMÓN had total savings of over Q.3,600,000 (US\$464,000), which represented 30 percent of all member contributions. The organization also made a total of over Q.2,800,000 (US\$361,000) in loans to 313 members.

ASOTRAMÓN has initiated a number of activities to both provide services to employees and increase the organization's resources. These include:

- Development and operation of a small store (Tienda ASOTRAMÓN)
- Development and operation of a cafeteria, including purchase of equipment and hiring of two cafeteria workers
- Creation of a transportation division, purchase of two large trucks and a van, hiring of four drivers and one transport assistant and contracting to Montana for transport services
- Holding two bazaars, which raised over Q. 800,000 (US\$103,000) during 2008.

ASOTRAMÓN also supports Marlin Mine community relations initiatives, including organizing and assisting in community celebrations.

2.11 Employee Training

The Marlin Mine provides a variety of training for all employees. Table 5 displays training provided during 2008, excluding social and environmental training, which are reported under subsequent sections of this AMR. In addition to this training, all Marlin employees receive regular safety training including a one-half hour industrial safety meeting on a weekly basis and a five-minute safety talk is held with all workers at the beginning of each shift. Other safety training is described in the Occupational Health and Safety section of this AMR.

Table 5. 2008 Marlin Mine Employee Training						
	Number Trained					
Job Classification	Male	Male Female Indigenous		Training Description	Certification	
Administrative Personnel	26	7	18	Industrial fire suppression Contingency brigade Incident analysis Light vehicle operations First aid Microsoft office		
Supervisor	41	0	5	Industrial fire suppression Contingency brigade Operations, First aid Neutralizing Cyanide		
Operators: -Plant -Heavy equipment -Underground -Drilling	165	2	117	Jumbo drill Bolting theory Axera 5-6 Caterpillar AD30 Articulated loader Marcotte Robolt 5 Industrial Safety	In-house training	
Laborers 35		4	27	Industrial safety New Employee Briefing Regulations First aid Industrial fire suppression Incident analysis Si Xray		
Maintenance: -Plant -Underground -Operations 42 0		0	5	First aid Light vehicle operation Safety manual Accident prevention Delta V Hydraulics		
Services	4	20	18	Accident prevention First aid		
TOTAL	313	33	190			

2.12 Purchasing

Marlin Mine purchasing is divided into two categories: operations purchasing for materials, equipment and supplies and contract services.

During 2008 Montana spent over \$154 million for materials, equipment and supplies for operations of the Marlin Mine. Of the total, about 53 percent or a little more than \$81 million was spent within Guatemala. Over \$888,000 in purchases were made in San Miguel Ixtahuacán and nearly that amount, about \$844,000 in purchases were made in Sipacapa, which is noteworthy in that the population of San Miguel is over twice as large as the population of Sipacapa. More than \$415,000 in purchases were made from women-owned businesses (see Table 6). The amount

purchased from indigenous-owned businesses is not known, because the businesses do not identify themselves as indigenous-owned. It is likely however than many of the businesses from San Miguel Ixtahuacàn and Sipacapa were owned by people of indigenous decent.

Table 6. 2008 Marlin Mine Purchasing: Materials, Equipment And Supplies*								
			By Locatio	n of Contract	tor			
	San Marcos Department Sipacapa Sipacapa Department Sipacapa Department Sipacapa Department Sipacapa Si							
2008 Total								
Operations								
Purchases	\$888,840	\$844,167	\$2,412,924	\$76,917,869	\$73,249,126	\$154,312,926		
Total								
Purchases								
from								
Women-								
Owned								
Businesses	\$73,167	N/A	\$342,115	N/A	N/A	\$415,282		

^{*} Note that purchasing in this instance includes expenditures for capital, increased inventories and other items in addition to operations costs.

During 2008 Montana spent over \$7.8 million for contract services. All of these expenditures were made in Guatemala (see Table 7).

Table 7. 2008 Marlin Mine Contract Services Purchases								
			By Location	of Contracto	r			
	San Miguel Sipacapa Sipacapa Sipacapa Sipacapa Sipacapa Total Elsewhere in Guatemala Total Cutside Guatemala							
Total Operations								
Contracts	N/A	N/A	\$620,973	\$7,882,945	N/A	\$8,503,918		

2.13 Land Acquisition

During 2008, Montana acquired an additional 329 cuerdas or approximately 35.5 acres of land for the Marlin Mine (see Table 8).

Table 8. Marlin Mine 2008 Land Acquisitions								
Number of Parcels Purchased	Number of Owners	Number of Women Owners	Total Area	Average Parcel Size in Cuerdas	Total Paid in Quetzales	Total Paid in Dollars		
7	7	1	329 cuerdas	47	Q.1,316,000	\$169,900		
,	,	1	35.5 acres	T /	Q.1,510,000	ψ102,200		

Although Montana has previously acquired all land necessary for the Marlin Mine, the company continues to purchase selected parcels from willing landowners to expand the buffer area. During 2008, Montana purchased 7 separate parcels of land from 7 separate owners. Parcel sizes ranged from 4.5 cuerdas to 100 cuerdas; the average parcel size was 47 cuerdas. Montana paid a total of Q.1,316,000 (\$169,900) for these parcels, or Q.4000/cuerda (\$4,816/acre). The average amount paid per parcel was Q.188,000 (\$24,271).

Homes and Improvements

Montana also paid Q.311,000 (\$40,151) to four landowners for improvements and crops on land purchased during 2008.

3.0 TAX AND ROYALTY PAYMENTS

During 2008 Montana paid Q.159.9 million (US\$20.4 million) in taxes and royalties for the Marlin Mine. Table 9 provides information on the specific taxes and payments. Since the mine began production in 2005, Montana has paid Q.44,561,047 (US\$5.8 million) in royalties, which have been split equally between the Municipality of San Miguel Ixtahuacán and the central government, as required by Guatemalan law. Additionally, Montana has set aside a reserve of Q.4,456,104 (\$575,000) for the Municipality of Sipacapa, an amount equal to 10 percent of total royalties. This constitutes a voluntary donation and the amount was calculated on the basis of the percentage of total Marlin property that is in Sipacapa though it does not qualify for royalties under Guatemalan law since no minerals are mined in Sipacapa.

Table 9. 2008 Marlin Mine Tax And Royalty Payments					
Guatemalan Tax	2008 Marlin Mine Tax/Royalty Payment		Tax/Royalty		
or Royalty	Quetzales	US Dollars	Type	Comments	
Income Tax*	Q.96,804,986	US\$12,497,852	Tax on gross income		
IVA (crédito fiscal)	Q.32,151,160	US\$4,150,824	Value Added Tax (VAT) – 12% on all purchases	Montana receives a refund on the portion of VAT attributable to export production. During 2008 Montana received Q.32,923,491 (US\$4,250,534) in IVA refunds for the period of July 2005 to June 2006.	

⁴ Montana also acquires property in areas with exploration potential; those purchases are not included in this AMR.

Table 9. 2008 Marlin Mine Tax And Royalty Payments					
Guatemalan Tax	2008 Marlin Mine Tax/Royalty Payment		Tax/Royalty		
or Royalty	Quetzales	US Dollars	Type	Comments	
IUSI	Q.915,940	US\$118,251	Tax on land	Can accrue to the municipality where the land is located under certain conditions	
Derechos Ancelarios	Q.324,634	US\$41,911	Import tax	Paid on certain non-exempt imported items	
Regalias Municipalidad y Gobierno Central	Q.19,244,060	US\$2,484,473	Royalties on production	50% distributed to the municipality where the ore is mined	
IGSS Patronal	Q.8,545,786	US\$1,103,290	Social security tax (employer's share)	Funds health care and hospitals	
Total	Q159,910,975	US\$20,396,601			
Employee share of IGSS	Q3,868,430.05	511,487.90	Social Security tax (employee's share)	Funds health care and hospitals	

^{*} Montana was scheduled to begin paying income taxes in 2008, but voluntarily began paying the tax in July of 2006. Because of this decision, the government of Guatemala received an additional Q.98,828,618 (\$12,924,642) through the end of 2007.

4.0 SIGNIFICANT EVENTS

The following significant events occurred during 2008:

- January 9: Repairs were scheduled for previously cut guy wires on three poles supporting the electric power transmission line that supplies power to the Marlin Mine. These poles were located on private property in the community of Agel and although the mine has a legal right of way for the power line, the property owner would not allow repair crews on the property to repair the guy wires. This resulted in a potentially hazardous situation.
- January 29: A truck in a convoy transporting sodium cyanide experienced mechanical problems and overturned on the Pan American Highway en route to the mine. No injuries or spill occurred and the container was removed from the overturned truck, placed on a new truck and transported to the mine without incident. However, the overturned vehicle remained on the side of the Pan American Highway for an extended period of time before the transport company involved responded with equipment to upright the overturned vehicle and cargo. Montana worked with the transport company to improve response times for disabled vehicle removal.

- March 15: Guatemala's Vice-President visited the Marlin Mine.
- March 25: A group of Guatemalan Congressmen visited the Marlin Mine along with number of news media reporters in the context of the discussion regarding modifications to Guatemala's mining law.
- March: Staff from the Guatemalan Ministry of the Environment visited the Marlin Mine site to take water samples. MARN staff intended to take a sample within the tailings impoundment, which does not discharge to the environment. Because MARN is legally restricted to sampling discharge points only, the Marlin Mine management did not allow samples to be taken. The MARN did take all samples indicated in the "External Monitoring" chapter of the approved EIS. Officials and staff from the Guatemalan Ministry of Mines conducted a follow-up visit to the site and were permitted to take samples from the tailings impoundment as MEM is not restricted to EIS or discharge points only. The MEM's samples were sent to a certified lab for testing. The MEM test results indicated water quality consistent with internal data maintained on file at Marlin, as is required in the "Internal Monitoring" chapter of the approved EIS.
- April: Montana was allowed to begin importing low sulfur diesel fuel from Mexico, which
 contains about 10 percent of the sulfur in diesel fuel available in Guatemala, for use in the
 underground mine. This has improved air quality in the underground mine.
- April: In response to an increasingly negative medial campaign by anti-mining NGO's from
 outside San Miguel Ixtahuacán and Sipacapa, a number of community officials from San
 Miguel Ixtahuacàn and Sipacapa visited the mine to learn more about the tailings dam,
 general mineral processing at Marlin and environmental, health and safety measures
 associated with the use of cyanide.
- May: A security guard lost control of a pick-up while driving to Huehuetenango. The pick-up was damaged, but fortunately there were no injuries.
- May: Four leaders from each community in the two municipalities of San Miguel Ixtahuacán and Sipacapa (a total of 260 people) visited the mine during May. The visits reduced uncertainty and concern promoted by NGOs from outside San Miguel Ixtahuacán and Sipacapa during the previous weeks.
- May 7: A bus transporting tunnel personnel was fired upon by an undetermined and unidentified number of people, about 2 kilometres (1.2 miles) outside of San Miguel. Three workers were injured. The perpetrators have not been identified.
- May 16 and 17: The mine and plant were shut down for 29.9 hours as a result of a deliberate act of sabotage. A local resident threw a cable across the main power line, short circuiting the line. The perpetrator would not allow access to her property to resolve the problem. A temporary settlement was negotiated.
- May 29: The ambassadors from Canada and Holland and the United Nations Development Program Director visited the mine.

- May: Successful planning meetings for 2008 community development projects were held during May. A total of 22 projects were conditionally approved with starting dates scheduled the first week of June
- June 10: The electrical power to the mine was cut by a deliberate act of sabotage. The perpetrator was the same woman from the community of Agel that sabotaged the line in May. As a result there was no gold production from June 11 to July 26. A second saboteur short-circuited the line a short distance away. Montana initiated negotiations and legal actions but was unable to resolve the issue during June. The San Miguel Ixtahuacàn municipal mayor assisted in talks to try to resolve the problem, and also assisted Montana in talks with the Federal Government. All community projects and sponsorships were suspended during attempts to resolve the conflict. A total of 14 communities expressed their support for the mine during the conflict. Surface and generator-powered underground mining operations continued during the power outage. Montana initiated construction of a by-pass for the transmission line and began planning a back-up power source.
- July 9: Montana received a letter from the Municipality of Sipacapa requesting that the company close its municipal communication office because the municipality was reportedly receiving threats from the owners of a water source that they would suspend a water supply project for a neighborhood in the town of Sipacapa until Montana and the Sierra Madre Foundation closed their respective offices in that town. Montana immediately sent a response asking for a meeting that took place on June 24. In that meeting, municipal authorities and local activists repeated the demand – even though portions of the demand appeared to be illegal – and complained about the Marlin Mine Community Relations staff and the company's communication strategy. In the end they delivered an "acta" expressing their demand to the mine manager. In response to those actions Montana closed its Sipacapa information office on July 28. However, in discussions with 11 communities around the municipality, Montana ascertained that there was substantial interest in hosting information offices in smaller communities; consequently, in cooperation with those communities, Montana developed a plan to open five smaller offices in the communities starting on August 4. The Sierra Madre Foundation also made plans to close its office and re-open in a community where they were currently working. Montana prepared an information campaign to explain these actions to the communities.
- July 21: Two Marlin Mine workers, a male and a female, were kidnapped on a road near the mine site by unknown assailants. Montana formed a crisis committee and requested the assistance of the Guatemalan police and army. After being taken to a remote location near the Mexican border, the kidnapped workers were able to escape and make their way to a small village where they were rescued by Montana personnel and security forces.
- July 26: Construction of the transmission line by-pass was completed and electric power was restored to the mine and mill. The Marlin Mine Community Relations Unit worked with local landowners and community leaders along the length of the line to develop mutually acceptable measures to ensure continued operations of the transmission line.
- September: Five new information offices were opened in the Municipality of Sipacapa, located in the communities of Pueblo Viejo, Salem, Xeabaj, Pie de la Cuesta and La Ciénega. These offices replaced the information office that was located in the Sipacapa municipal center that had been vacated at the request of municipal officials.

- October: Montana, the Municipality of San Miguel Ixtahuacàn and the Municipal Health Commission agreed upon a final design for construction of a new Health Center in San Miguel. Meetings were held with the Mayor and municipal and health commission representatives to establish an action plan to begin construction.
- October: A truck transporting cyanide to the Marlin Mine left the road near the mine and went into a ditch, but did not overturn. The incident was a result of operator error. Montana worked with the transport company to implement improved driver training, rest periods, and truck mechanical reviews as a result of these incidents and also as part of the program to achieve compliance with the International Cyanide Code (the Code). Certification of the Code at Marlin is anticipated in 2009.
- November: Two agreements with communities along the electric power transmission line were signed and agreements with the remaining communities were prepared. The reaction of the community authorities to the agreements was positive and implementation of the projects began in November.
- December: The remaining agreements with communities along the electric power transmission line were signed and the projects begun with Montana financial support. Eight projects were finished during 2008 and the rest were scheduled for completion in early 2009. By early 2009, a total of 12 agreements were signed.
- December 10, 2008: The Nueva Esperanza Urban Center was competed and transferred to the community. The Guatemalan Ministry of Energy and Mines Vice Minister for Sustainable Development and MEM Mining Director attended the transfer ceremony and celebration along with community leaders and the Mayor of San Miguel Ixtahuacán. Information about the Urban Center is contained in Attachment A to this AMR.
- Undated: Seven internally reportable environmental spills occurred in 2008. All were contained within the operations area and all were cleaned up immediately. None reached any drainage nor resulted in any off-site effects. Four of the spills (all less than 100 gallons) occurred in the process plant area did not reach outside of the immediate vicinity of the process plant. The other three spills (all also less than 100 gallons) were petroleum products and did not reach outside the immediate operations area. Corrective actions included maintenance reviews, improving operator awareness in the area and preventive measures related to equipment maintenance.

5.0 LIAISON WITH EXTERNAL PARTIES

5.1 Guatemalan Monitoring Requirements for the Marlin Mine

MEM and MARN Requirements

The Guatemalan Ministry of Energy and Mines (MEM) and Ministry of Environment and Natural Resources (MARN) are the two primary government agencies that oversee mining activities within the country. According to Article 31 of the Guatemalan Mining Law, a mining exploitation license holder is required to prepare and submit an Environmental and Social Impact Statement (EIA&S) for proposed projects. The MARN is the agency that approves the document, and the MEM requires a copy of the MARN approval in order to issue the exploitation license. Upon

project approval, the license holder is required to comply with the recommendations contained in the EIA&S. Montana is also required to comply with the 13 terms of the MARN resolution 779-2003/CRMM/EM approving the EIA&S document.

The Marlin Mine EIA&S proposed an environmental monitoring program which included the stations and monitoring frequencies shown in Table 10.

Table 10. Marlin Mine Monitoring Requirements					
Resource	Sample ID	Sample Frequency	Standards		
Discharge	Pit Discharge	Quarterly	World Bank & MARN Effluent Standards		
Discharge	Tailings Discharge	Quarterly	World Bank & MARN Effluent Standards		
Discharge	Waste Dump	Quarterly	World Bank & MARN Effluent Standards		
Discharge	Area 5 Waste Dump	Quarterly	World Bank & MARN Effluent Standards		
Discharge	Oil-Water Separator	Quarterly	World Bank & MARN Effluent Standards		
Surface Water	SW1	Quarterly	Compare upstream to downstream and watch for trends		
Surface Water	SW1-2	Quarterly	Compare upstream to downstream and watch for trends		
Surface Water	SW2	Quarterly	Compare upstream to downstream and watch for trends		
Surface Water	SW3	Quarterly	Compare upstream to downstream and watch for trends		
Surface Water	SW4	Quarterly	Compare upstream to downstream and watch for trends		
Surface Water	SW5	Quarterly	Compare upstream to downstream and watch for trends		
Streambed Sediment	SW1 Sediment	Annually	Compare upstream to downstream and watch for trends		
Streambed Sediment	SW1-2 Sediment	Annually	Compare upstream to downstream and watch for trends		
Streambed Sediment	SW2 Sediment	Annually	Compare upstream to downstream and watch for trends		
Streambed Sediment	SW3 Sediment	Annually	Compare upstream to downstream and watch for trends		
Streambed Sediment	SW4 Sediment	Annually	Compare upstream to downstream and watch for trends		
Streambed Sediment	SW5 Sediment	Annually	Compare upstream to downstream and watch for trends		
Ground Water	MW2 (replaced with MW8)	Quarterly	Watch for trends		
Ground Water	MW3 (replaced with MW3B and MW10)	Quarterly	Watch for trends		
Ground Water	MW4 (replaced with MW11)	Quarterly	Watch for trends		
Ambient Air	AQ1 (replaced	Quarterly	World Bank Guideline		

Table 10. Marlin Mine Monitoring Requirements				
Quality	with AQ1a)			
Ambient Air Quality	AQ2	Quarterly	World Bank Guideline	
Ambient Air Quality	AQ4	Quarterly	World Bank Guideline	
Ambient Air Quality	AQ5 (AQ12)	Quarterly	World Bank Guideline	
Ambient Air Quality	AQ6 (NA)	Quarterly	World Bank Guideline	
Ambient Air Quality	AQ7 (AQ12)	Quarterly	World Bank Guideline	
Ambient Air Quality	AQ8 (AQ7)	Quarterly	World Bank Guideline	
Noise	Agel	Quarterly	World Bank Guideline	
Noise	SJ Nueva Esperanza	Quarterly	World Bank Guideline	
Noise	SJ Ixcaniche	Quarterly	World Bank Guideline	
Noise	Tzalem	Quarterly	World Bank Guideline	
Noise	Canzil/Poj (Carrizal)	Quarterly	World Bank Guideline	
Noise	Chuena	Quarterly	World Bank Guideline	
Aquatic Life (5 stations)	SW1, SW2, SW3, SW4, SW5	Bi-annually	Watch for trends	
Terrestrial Biology	3 parcels	Annually	Watch for trends	
Forestry Cover	Area of Influence	Every Two Years	Watch for trends	
Public Opinion	Various	Annually	Watch for trends	
Socioeconomics	Various	Annually	Watch for trends	

A map showing the locations of environmental monitoring stations is included as Attachment C. As indicated in the table, some air quality monitoring station locations have changed. For example, Station AQ5 was to be located at Siete Platos to monitor traffic—related air quality impacts. However, at the time Montana was unable to reach an agreement to conduct the monitoring with the landowner where electric power could be used to run the station. In lieu of AQ5, a station to monitor traffic impacts was established in Chuena along the same access road. The point is labeled AQ12, although at the time of the writing of the EIS it was labeled AQ7.

Station AQ6 was located in what is now a disturbed area within the mine, well within the property boundary. For this reason, this point is no longer monitored because it is not representative of ambient air quality. AQ8 was located in Cancil, which was an upwind monitoring location. However, access to electrical power was better in the community of Poj/Carrizal, which is also located upwind of the mine. For this reason point AQ8 was replaced with AQ7 in Poj/Carrizal. In addition to the air quality points established in the EIA&S, Marlin established an additional upwind monitoring station labeled AQ9 in the community of Salem in the Municipality of Sipacapa, and two baseline and background monitoring stations in Salitre labeled AQ10 and AQ11.

Groundwater monitoring well MW2 became blocked; likely a result of a break in the PVC pipe, and thus a new well, MW8, was commissioned to be used as an upstream monitoring point. Groundwater well MW3 was sabotaged and filled with rocks and therefore a new well, MW3B, was installed near MW3. An additional well, MW10, was installed to more rigorously monitor downgradient of the TSF. Lastly well MW4 was replaced with well MW11, which was also installed downgradient of the TSF.

An additional point for aquatic biology monitoring was implemented, SW10, to include a study area upstream of the Rio Tzalá's confluence with Rio Cuilco. The data from this station represents an area completely outside of any mine related influences.

The results of the Marlin Mine monitoring program must be presented to the MARN and MEM every 3 months.

Other Requirements

No other Guatemalan institutions require environmental monitoring for the Marlin Mine; however, the Ministry of Public Health and Social Assistance (MSPAS) is authorized to conduct audits and the National Institute of Forests (INAB) may conduct field inspections to assess the implementation of the Forest Management Plan.

5.2 Ongoing Public Consultation and Disclosure

Montana has an ongoing Public Consultation and Disclosure Program (PCDP) for the Marlin Mine. The objectives and initial elements of the program are described in the *Marlin Mining Project Public Consultation and Disclosure Plan*, which was submitted to IFC as a supporting document for the original IFC loan application. Marlin Mine public consultation and disclosure policies and procedures have evolved over time as conditions have changed and mine staff and local officials and residents have become more familiar with each other. The key elements of Marlin Mine communications program include:

- A 17 member Community Relations Unit, which includes Mam and Sipakapense-speaking residents of San Miguel Ixtahuacàn and Sipacapa, who visit individuals, organizations, schools and communities to provide information about mine activities and initiatives and respond to issues and requests.
- Montana maintains seven Marlin Mine public information offices; one in the municipal seat
 of San Miguel Ixtahuacàn, five in the communities of Salem, Pueblo Viejo, Xeabaj, Pie de la
 Cuesta and La Ciénaga in the municipality of Sipacapa and one in the community of Las
 Delicias in the municipality of Tejutla.
- Guided tours of the mine for individuals, organizations and public officials.
- An extensive print and broadcast media communications program, which includes a variety of locally produced and circulated documents that 1) provide information about mining, Marlin Mine activities and initiatives and responses to current issues, and 2) regional and national print and broadcast announcements concerning various aspects of Marlin Mine activities. During 2008, national communications initiatives also include billboards and posters in Guatemala City.

- Montana has a formal grievance redress process available to both the public that uses a
 formal documented system but is fully functional with persons who wish to make oral
 declarations in Spanish, Mam or Sipacapanese. There is a separate system for Marlin Mine
 employees in accordance with Goldcorp corporate policy and Guatemala law.
- Disclosure of Marlin Mine activities and social and environmental performance through preparation and publication of annual monitoring reports, which are available on the Goldcorp and Goldcorp Guatemala websites.
- Communication of Marlin Mine tax and royalty payments, on a billboard at the Marlin Mine entrance and through pamphlets and radio announcements.

Marlin Community Relations Unit

One of the key elements of the PCDP is the Community Relations Unit of the Marlin Mine Sustainable Development Department, made up of Mam and Sipakapense-speaking residents of the municipalities of San Miguel Ixtahuacán and Sipacapa and headed by a community relations specialist. The Community Relations Unit has been trained to provide information about the mine and to conduct meetings and facilitate participation of indigenous peoples at the community, organization and individual level. The public consultation and disclosure work of the Community Relations Unit has been expanded over time to include communities throughout the municipalities of San Miguel Ixtahuacàn and Sipacapa as well as communities in the Departments of Huehuetenango and Quetzaltenango that are located along the access road to the Marlin Mine from the Pan American Highway and most recently, communities located along the electric power transmission line from Tejutla to the mine.

As shown in Table 11, the Marlin Mine Community Relations Unit made 729 visits to individual communities and held meetings attended by a total of 3,288 people during 2008. A total of 15,072 people were contacted individually and 970 people visited Marlin's seven community information offices. A total of 550 people also toured the Marlin Mine during 2008.

Table 11. Public Consultation Summary: Community Relations Unit							
Consultation Type	Number of Consultations						
Consultation Type	2003/2004	2005	2006	2007	2008	TOTAL	
Community Visits	179	163	727	796	729	2,594	
Number of persons attending meetings	11,609	4,357	10,722	17,726	3,288	47,702	
Number of persons contacted individually					15,072*	15,072	
Number of Persons visiting the mine	3,389	2,414	459	628	550	7,440	
Number of persons visiting the information offices					970*	970	

^{*}Not previously tracked

Montana Staff Contacts

In addition to these visits, a variety of Montana personnel held numerous formal, informal and ad hoc meetings with community, departmental and national government officials, NGOs and individuals. These meetings occurred frequently and addressed a variety of topics.

Public Communications

Montana has an ongoing public communications program that includes the following elements:

- <u>Volantes Informativos (Flyers):</u> These are short papers often one page on specific topics that are widely distributed in communities near the Marlin Mine. Each *volante* has a circulation of about 2,000 copies. During 2008 Montana published and circulated six *Volantes Informativos*. The topics for the *volantes* included 1) information about the tailings dam, 2) information about the kidnapping of two Marlin Mine employees, 3) information about the opening of five new public information offices in the Municipality of Sipacapa, 4) information about a dance at the San Miguel Ixtahuacàn fair sponsored by Montana, 5) information about the mine-sponsored contest "Looking for the Marlin family," and 6) an invitation to residents of communities near the mine to participate in the first annual "Posada Montana."
- <u>Boletín El Ingeniero</u>: With a circulation of about 2000, *El Ingeniero* is the Marlin Mine's major print medium for ongoing communications with neighboring communities. *El Ingeniero* provides easily understood stories of aspects of mining, mine and community events and milestones, community projects, profiles of mine employees, and occupational health, safety and environmental programs. Two issues of *El Ingeniero* were distributed during 2008.
- <u>Folletos (Pamphlets)</u>: Illustrated pamphlets are used to provide more detailed information about various aspects of the Marlin Mine. During 2008 a pamphlet was circulated which provided information about Montana's "Future with Responsibility" policy, the company's respect for and compliance with Guatemalan Law, environmental protection activities, tax and royalty payments and sustainable development initiatives such as the company's role in education and economic, infrastructure and community development initiatives. These pamphlets are available at Montana's information offices in San Miguel Ixtahuacán, Sipacapa and Tejutla, at the Marlin Mine offices and at Montana's offices in Guatemala City and are distributed to visitors and at events. About 2,000 Folletos were distributed during 2008.
- <u>Posters</u>: Posters are used to extend and amplify the coverage of flyers and pamphlets. Posters containing the information in selected flyers and pamphlets are placed in public places in local communities, often at Auxiliary Mayor's offices, schools, and other publicly accessible locations. In 2008, the Community Relations Unit distributed two posters, which provided information about 1) the tailings dam, and 2) the abduction of two Marlin Mine employees. A total of 125 posters were distributed during 2008.
- <u>Radio Announcements</u>: Radio is one of the most important mass communications media in Guatemala. Marlin Mine announcements are made on a variety of local, regional and national radio stations covering topics such as the payment of taxes and royalties and environmental, social and economic aspects of Marlin Mine activities. Radio announcements placed on local radio stations are broadcast in the Mam and Sipakapense languages as well as Spanish. During 2008, radio announcements communicated the payment of taxes and royalties to

national and local governments and human-interest stories concerning the successes of Marlin Mine workers. Also, radio announcements were used to support Montana's public information campaign titled... "For us in Goldcorp, development is what is important." At the local level, radio announcements were used to support the "Day of Health" campaign. Montana also sponsored radio advertisements for local sporting and social events in San Miguel Ixtahuacán and Tejutla in the Department of San Marcos. During 2008, Montana ran an average of 720 announcements per month on three local radio stations and an average of 135 spots per month on four national radio stations. Additionally, Montana initiated a special communications initiative on four regional radio stations during the period when sabotage of the electric power transmission line occurred.

- <u>Cable Television Announcements</u>: During 2008, Montana ran a monthly average of 168 television announcements on two different cable television stations that serve the Department of San Marcos and local communities near the mine. Again, Montana initiated a special television communications initiative that included announcements on one national and two regional cable television stations in response to the acts of sabotage on the electric power transmission line.
- <u>Newspaper Announcements:</u> Announcements are published in local, regional and national newspapers to communicate significant events and technical, environmental, social, economic and legal aspects of the Marlin Mine that might not be otherwise covered by the press. Montana published one-page announcements in four newspapers for several days during its communications initiative in response to the acts of sabotage on the electric power transmission line
- <u>Magazine Announcements</u>: Similar to newspaper announcements, Montana published onepage informative advertisements in four national magazines.
- <u>Issue/Briefing Documents:</u> Montana prepares and circulates documents on a variety of aspects of mining in general and the Marlin Mine in specific. These documents are circulated to interested government and private sector representatives.
- <u>Video presentations:</u> Montana has developed a number of video presentations on aspects of the Marlin Mine. These presentations are circulated to television stations and other interested groups and individuals in DVD format.
- <u>Briefings:</u> Montana has held a number of briefings for representatives of the banking, commerce, industrial and governmental sectors.

In addition to these communication efforts, Goldcorp conducted a nationwide communication initiative during the fourth quarter of 2008 that included a series of announcements in newspapers and magazines, radio and television stations and on billboards and kiosks in Guatemala City and throughout the country. These announcements were designed to familiarize the public with Montana and Goldcorp and their social and environmental policies, and the environmental, social and economic activities and benefits of the Marlin Mine.

Another method for communicating with the public is through the Goldcorp website, which contains information on the Marlin Mine including Goldcorp press releases. Goldcorp posts Marlin Mine Annual Monitoring Reports on the website. The 2004 through 2007 AMRs for the Marlin Mine are available to the public in English on the Goldcorp website at

http://www.goldcorp.com/operations/marlin/reports/; the 2004 through 2007 AMRs and other documents are available in Spanish on the Goldcorp Guatemala website at http://www.goldcorpguatemala.com/index.php?showPage=56&cache=1. The 2008 AMR will also be available on both websites. The Goldcorp Guatemala website provides additional information including news items, tax and royalty payments, sustainable development activities, environmental protection and restoration activities and industrial health and safety policies.

Grievance Redress

Montana has established responsibility and resources for addressing community-based grievances within the Marlin Mine Sustainable Development Department. The institutional grievance system allows for improved tracking and documentation of local inquiries, grievances and complaints. Montana implemented the new grievance system in early 2007. The Sustainable Development Department presented the policy and procedures to company employees – most of whom are residents of nearby communities – stressing that the community grievance policy is not a system for labor issues, and then presented the grievance policy and procedures to communities. The system provides a formal, documented system to respond to inquiries from members of neighboring communities. The system takes into account that some community members do not read or write and that their native language may be Mam or Sipakapense rather than Spanish.

The community grievance redress process was invoked three times during 2008.

• <u>Grievance</u>: On January 31 a farmer from the community of Chuena stated that his cattle were dying because of dust from the principal mine access road that is also the main access road for all of San Miguel Ixtahuacán to the Pan American Highway.

Montana Response: Montana contracted with a veterinarian who is a member of the faculty of Veterinary Medicine and Zoology at the University of San Carlos to examine the cattle. The examination occurred on February 11 on the farmer's property in Chuena. In the report documenting the results of his examination, the veterinarian determined that the cattle were anemic as a result of malnutrition (the cattle had little access to green pasture as they were pastured in a fallow cornfield) and external parasite infestation, and that the illness was in large part the result of inadequate forage. The veterinarian found no evidence of pulmonary disease. The veterinarian's recommendations included administration of parasite medications, vitamins, mineral supplements and above all, dietary improvements including access to green pasture.

• <u>Grievance</u>: On August 25 a woman from San Jose Nueva Esperanza stated that on August 8th she was verbally harassed and intimidated by a mine security guard to the point that she was concerned for her personal safety.

Montana Response: Upon receiving the complaint, Montana obtained photographs of all the security guards assigned to the mine and reviewed the photos with the complainant. The complainant identified two guards from the photos who resembled the guard involved in the incident. Montana worked with the security company to bring the two guards to a location where the complainant could view them anonymously. After viewing each of the two guards individually, the complainant was unable to identify either guard as the one involved in the incident. As a result, the grievance was closed by mutual agreement of the complainant and Montana. As follow-up, meetings were held with the contracted security company personnel to reiterate Goldcorp's security policy including compliance with the Voluntary Principles on Security and Human Rights.

• <u>Grievance</u>: On November 2, a landowner from San Jose Nueva Esperanza stated that he had not received reforestation incentive payments for caring for trees on 300 cuerdas (32.4 acres) of his land located in Canoj in the municipality of Sipacapa, in accordance with an agreement with the Marlin Mine Environmental Department. The complainant also stated that the condition of some of the reforested areas on his property was poor and the trees had not been properly maintained.

<u>Montana Response:</u> The Marlin Mine Sustainable Development Department reviewed the Reforestation Incentives agreement between this complainant and the mine and other entries in the forest incentives case file and made the following findings:

Although the complainant initially offered 300 cuerdas (32.4 acres) of land for reforestation, only 135.25 cuerdas (14.6 acres) were accepted into the program (110.25 cuerdas [11.9 acres] in 2004 and 25 cuerdas [2.7 acres] in 2005). The records show that the complainant has been paid reforestation incentives for this land in each year that the land has been in the program.

Marlin Mine Environmental Department employees have maintained the reforested areas on the complainant's land, although for a period of time the complainant would not allow staff on his property to maintain the trees and the complainant's neighbors would also not allow vehicular access to the complainant's property as a result of their relationship with him. These circumstances made it difficult to water the trees in the reforested area. It should also be noted that watering is not a stipulation of the Reforestation Agreement, but is carried out voluntarily by the company.

These problems notwithstanding, the complainant requested that the remaining portion of his 300 cuerdas be reforested. As a prerequisite for reforestation of the remaining land, the Marlin Mine Environmental Department signed a new agreement with the complainant that contained a number of conditions addressing the previously-experienced issues on this property. According to the new agreement, reforestation work and payments would be terminated if any of the conditions were violated.

After initiating work under the new agreement, the Environmental Department discovered that the complainant cut down a number of trees within the reforested area and terminated the contract.

The portion of the complainant's land that was previously reforested is still in the program, although it is not an obligation of the company to retain the land in the program.

Montana forwarded the information about this case to the Director of the INAB (Instituto Nacional del Bosque or National Institute of Forestry) in San Marcos for review.

Although the Sustainable Development Department only received three complaints under the formal grievance redress system during 2008, it is important to note that community members frequently prefer to make informal complaints to mine managers, department supervisors and other employees. Many of these complaints are resolved at that level, consequently community members are not inclined to make subsequent formal complaints though employees are encouraged to offer that option to all complainants.

It is also important to note that disruptive actions such as roadblocks, vandalism and occasional acts of violence against employees occur, but at least in cases where the perpetrators are known, the individuals and groups involved appear to have been more interested in making political statements and gaining media attention than working with the company through the grievance mechanism process to resolve issues.

Community Environmental Monitoring Association (AMAC)

In September 2005, residents of communities near the Marlin Mine formed *Asociación de Monitoreo Ambiental Comunitario* (AMAC) to conduct an independent community-based environmental monitoring program in the area around the mine. Avanzar, an independent consulting firm that provides facilitation services to AMAC, provided information for this section. In addition to Avanzar, AMAC receives technical assistance from two technical representatives, a civil engineer/geologist and a chemist, both members of the Faculty of Engineering of the University of San Carlos in Guatemala, and a social facilitator.

Legal Status and Decision Making

AMAC is independent and community-based; each of the participating communities elects their representative in a community assembly. In the last quarter of 2008, AMAC obtained its registered legal status as an association. The association's internal regulations require that decisions be made in assemblies that follow local traditions. The association is under the direction of an executive committee comprised of a president, vice president, secretary and treasurer. New executive officers were elected in September 2008 and the new president took office in a smooth transition of authority.

Funding

AMAC has an agreement with FUNSIN (Foundation for the Advancement of Engineering – a foundation with headquarters in the Guatemala School of Engineering) for the management of funds. FUNSIN manages funds obtained from any source to enable AMAC to retain its independent status. To date the IFC, Montana and the Canadian Embassy have contributed funds to support AMAC's activities. IFC's funding commitment ended in July of 2008 and the Canadian Embassies funding started in the fourth quarter of 2008. AMAC continually strives to diversify its funding base.

Training

AMAC members continued to receive training on conflict resolution, communication and negotiation, water sampling procedures and techniques, cyanide, basic chemistry, concepts and practical examples of variables analyzed in surface and groundwater sampling, and in the uses, applications and toxicity of metals and non-metals. Training was repeated for the benefit of new members recently elected to the association and for existing members to review the themes they had already studied. Previously, at the request of AMAC members, the technical support team provided training on the chemistry of the elements and components considered in the laboratory analysis of the water samples. A specific training was held for the female representatives of the association that addressed gender issues. AMAC also expanded its water sampling training program beyond the role of preservatives, the selection of the location of sampling points, comparison of laboratory sampling results with IFC water quality guidelines, and revision of the sampling protocols to also include analysis of baseline data, and how to recognize acid drainage and other environmental contamination from water sample results.

Water Sampling

AMAC collected water samples four times during 2008, during the months of February, May, August and November. Sample points varied by sampling event to ensure adequate coverage of all points. The samples obtained were sent to a laboratory chosen by AMAC (ALS Laboratory Group in Canada, an internationally certified laboratory).

Analysis of Laboratory Results

As in previous years, AMAC continues to compare the laboratory results between upstream and downstream monitoring points, as well as to review water quality trends over time, the company's base line studies and to review IFC effluent guidelines. AMAC then meets with technical staff from the Marlin Mine to compare their results with the company's results. The laboratory results from all samples taken during 2008 by both AMAC and by the mine personnel were consistent and did not show any significant negative impacts related to mining activity.

Communications

AMAC also continues its communication activities aimed at participating communities and external groups. Shortly after the quarterly laboratory results analysis meetings, AMAC members visit participating communities to present and explain the results. In December 2008, AMAC organized two municipal-wide meetings for the municipalities of Sipacapa and San Miguel Ixtahuacán. At these meetings, AMAC presented its mission and findings for 2008. Throughout the year, AMAC presented its work and findings to local social services organizations, the auxiliary mayors of San Miguel Ixtahuacán, the Guatemalan MEM, the Guatemalan MARN, selected embassies and other Guatemala City-based agencies and organizations. During 2008, AMAC presented their results and findings to over 800 community residents in the municipalities of Sipacapa and San Miguel Ixtahuacán.

AMAC Interactions with Marlin Mine Officials

During 2008, AMAC interacted with Marlin Mine officials regarding the following committee and community concerns.

AMAC requested specific information regarding the tailings dam, cyanide, and the underground mine. As a result, AMAC representatives toured the underground mine, the waste incinerator, the tailings dam and other facilities at the mine.

On September 5th, AMAC representatives conducted a surprise visit of the mine to ensure that the mine was carrying out preventative environmental measures. With advice from the technical representatives, AMAC did not find any irregularities.

Community concerns regarding potential contamination by a restaurant led to a visit by AMAC. Once the source of the contamination was determined, AMAC asked the company to build a septic tank for the restaurant causing the contamination. Several repairs to other septic tanks were also conducted by Montana as a result of AMAC's review.

AMAC Interactions with Other Officials

The Xeabaj community in the Municipality of Sipacapa was concerned that their water supply might not be potable and might have been contaminated. AMAC liaised with the local Health Center to conduct an independent sampling of their water. The Health Center's results indicated that their water supply is potable. AMAC communicated these results to the community.

AMAC worked with the Health Center in San Miguel Ixtahuacán so that residents of San José Ixcaniche and Siete Platos could be examined by the doctor who could then address their concerns and identify the potential causes of various illnesses. The doctor determined that the skin sores and other skin diseases were caused by poor hygiene and not contamination of any kind.

Fundación Sierra Madre Community Advisory Councils

Fundación Sierra Madre (FSM – described in Section 9.2 of this AMR) has established Community Advisory Councils (CADEC) in the municipalities of San Miguel Ixtahuacàn, Sipacapa and Máquivil, and has developed rules, procedures and structures for the CADEC. The CADEC are intended to engage the communities in the formulation and implementation of the Foundation's plans and strategies. Two CADEC meetings were held during 2008 in addition to an annual meeting to review FSM's annual work plan.

6.0 SCHOOLS

Montana coordinates with local communities, national, departmental and local educational institutions, FSM and other NGOs to strengthen and improve educational resources in communities near the Marlin Mine. Montana's educational initiatives include supporting municipalities and communities in the construction and improvement of school facilities through the work of the Marlin Mine Community Development Program (see Section 9.1), funding of school equipment and supplies and funding of the salaries of teachers. During 2008, Montana funded the salaries of 36 teachers including 23 in communities in the municipality of San Miguel Ixtahuacàn, 12 in communities the municipality of Sipacapa and 1 in the municipality of Malacatancito. Montana contributed Q.749,147 (US\$98,573) during 2008 for the funding of these 36 teachers. The additional teachers lower the teacher/student ratios in the affected schools, resulting in more individual attention for students. Since its inception in 2004, teachers funded by Montana have helped educate a total of 5,800 students in community schools near the mine.

Montana has also worked supported a number of communities in the construction and improvement of schools and classrooms in communities in the municipalities of San Miguel Ixtahuacàn, Sipacapa and Malacatancito. Montana's 2008 support for school initiatives are described under a later section of this report, titled Marlin Organizational Development Unit and Community Development Funding.

A collateral benefit of the Marlin Mine project is that school enrollment is increasing, in part because of the increased availability of year-round work in communities near the mine. Information about school enrollment is collected from schools in each directly affected community. Table 12 contrasts 2002 and 2008 enrollment for schools in villages near the mine site.

Table 12. Enrollment In Schools Near The Marlin Mine: 2002 – 2008						
Community/School 2002 Ending Enrollment 2008 Change in Number Change From 2002 From 2000 Fro						
Agel	208	259	51	25%		
San José Ixcaniche	97	161	64	66%		
San Jose Nueva Esperanza	57	93	36	63%		
Salitre	208	354	146	70%		
Siete Platos	129⁵	170	41	32%		
Salem	58	94	36	62%		

School enrollment has increased substantially between 2002 and 2008 in every community near the mine site, despite relatively minor changes in population. Fewer families are traveling to the coast for work and more children are completing the school year. It is also clear from discussions with teachers that fewer children are dropping out of school each year, although the dropout rate in some schools continues to be relatively high.

7.0 HEALTH

Montana's health care strategies for communities near the Marlin Mine have evolved over time. Initially the company supported development of health care facilities and services through Fundación Sierra Madre in partnership with other health care NGOs. During the past several years, the company sponsored the health baseline study described below and participated in numerous discussions with the Guatemalan Ministry of Health. Also during this period, the emphasis shifted from immediate delivery of health care services to sustainability of the local health care delivery system.

GETSA (Gestión y Tecnología en Salud) completed a baseline health study that included communities within the municipalities of San Miguel Ixtahuacàn and Sipacapa. The Health Baseline Study has been reviewed and approved by the Ministry of Health of Guatemala effective October 27, 2006. Part of an agreement between Montana and the Ministry of Health is the sharing of the baseline study information in communities in the area near the Marlin Mine. This work is pending implementation as part of a regular health-monitoring program.

The Health Baseline study provides information about the health conditions and services prior to the development and operation of the Marlin Mine. It also provides technical information to better plan Montana's support of the local health system in coordination with the Ministry of Health, and a platform to implement a health monitoring system that will be useful for Montana and the Ministry of Health during the life of the Marlin Mine.

The information developed in the initial baseline study also justified a higher level of health care and the development of a Level I⁷ health center in San Miguel. In January of 2007, the Ministry of Health and Montana signed an agreement for 1) the sharing of results from the Health Baseline

May 1, 2009

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⁵ The Siete Platos enrollment number is from 2004. The 2002 enrollment was not available.

⁶ See Section 8.2 for a description of Fundación Sierra Madre.

⁷ This health center categorization has been superseded by one developed by the new central government administration.

study, 2) a joint effort to implement a health monitoring program to build on the Health Baseline study and 3) improvement of the San Miguel Health Center to a provide 24 hour/day integrated health care.

Montana is currently in discussions with national organizations about the possibility of conducting a longitudinal health study, which will monitor health conditions described in the GETSA Health Baseline study. As currently conceived, researchers would conduct the study under guidance from the Guatemalan Ministry of Health with financial support from Montana.

Also during 2008, the Marlin Mine Sustainable Development Department collected additional health monitoring information and provided the information to the MEM as part of its annual monitoring report.

Regarding the remodeling and expansion of the San Miguel Health Center, during 2008 Montana worked with the Municipality, the Ministry of Health, and municipal health care authorities to finalize the design and engineering for the expanded Health Center. A supervising engineer for the project was also hired. Earthwork in advance of construction of the center is anticipated to begin in early 2009.

Montana has an on-going process to procure equipment for the center; during 2007 and 2008 the company purchased x-ray and other equipment and supplies. This equipment is in storage until it can be integrated with the remodeling of the San Miguel Health Center.

8.0 MARLIN MINE ROLE IN POVERTY REDUCTION

The IFC's mission is to "promote sustainable private sector investment in developing countries, helping to reduce poverty and improve people's lives." The Marlin Mine Social and Community Development Program, described in the Indigenous Peoples Development Plan submitted as part of the IFC loan application, includes activities intended to ensure that residents of communities near the mine site will share in the benefits of the mine in a manner that substantially reduces poverty and improves their lives. This section of the AMR demonstrates Marlin Mine progress in achieving that goal.

In February of 2003, the World Bank released "Poverty in Guatemala," a five-year comprehensive analysis of poverty in Guatemala conducted through the Guatemala Poverty Assessment Program (GUAPA). The study's three main objectives were to 1) conduct a multi-dimensional analysis of poverty in Guatemala using both quantitative and qualitative data; 2) examine the policies of government spending and policies on the poor; and 3) use the empirical findings of the report to identify options and priorities for poverty reduction in the future.

The Priority Actions for poverty reduction contained in the study include the following:

1. *Promoting economic growth*: The study notes that "In this context, the main engine of growth is likely to come from the private sector" and that priority actions should include "promoting growth with special emphasis on sectors that are likely to generate substantial employment

⁸ Poverty in Guatemala, Report No. 24221-GU. World Bank. February 20, 2003.

⁹ Ibid, Executive Summary, p.i.

for the poor." Activities which could support growth in non-farm activities in rural areas include:

- a. increasing and improving the targeting of investments in education and technical training;
- b. increasing investments in transport and basic infrastructure, which are crucial for the diversification, growth and inclusion of the poor in the rural economy; and,
- c. policies that promote micro, small and medium-enterprises (MSMEs), a segment of the private sector that tends to generate a lot of employment.
- 2. Investing in education, with priority actions to improve quality and access to pre-primary and primary education.
- 3. Investing in health, with an emphasis on expanding access and usage using both supply- and demand-side interventions.
- 4. Integrating actions to reduce malnutrition into the basic health-care package.
- 5. Reducing isolation and improving communications by investing in rural transport and roads.
- 6. *Improving governance and the effectiveness of the public sector.*

The study also identifies priority target groups for poverty reduction, including (a) poor and malnourished children, (b) poor women and girls, (c) poor indigenous households, (d) the rural poor, and (e) specific geographic areas including the Department of San Marcos.¹⁰

The following provides brief highlights of Marlin Mine 2008 social and community development activities and outcomes that correspond to each of the GUAPA priority actions for poverty reduction. Each aspect of the Marlin Mine and its Sustainable/Community Development Program is presented in detail in other sections of this AMR.

1. Promoting Economic Growth

The Marlin Mine has promoted economic growth in the following ways:

- a. **Payroll**: The 2008 payroll for the Marlin Mine totaled over US\$16.9 million (Q.131 million), including Montana direct and contract employees. Of that amount, 96% percent, almost US\$16.2 million (Q.125 million) was paid to Guatemalan workers, including US\$5.45 million (Q.42 million) paid to workers from San Miguel Ixtahuacàn and over US\$1.4 million (Q.11.1 million) paid to workers from Sipacapa. Employees from San Miguel Ixtahuacàn and Sipacapa are virtually all indigenous and most were in poverty at the time of hire. In all, 50 percent (US\$8.5 million) of the 2008 Marlin Mine payroll was paid to employees from San Marcos Department.
- b. **Purchasing**: During 2008 Montana spent about \$888,000 in for materials and supplies in San Miguel Ixtahuacàn and just slightly less, about \$844,000 in Sipacapa,

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¹⁰ Ibid, Executive Summary, pp.x – xiii

which is noteworthy because Sipacapa is about half the size of San Miguel Ixtahuacàn in terms of population. Including both direct and contract purchase, Montana spent over US\$3 million (Q.23 million) in San Marcos Department in 2008.

- c. **Land Acquisition**: During 2008, Montana paid over US\$210,000 (Q.1.6 million) for land and improvements. All of the landowners who received payments were indigenous. Payments for this land were substantially above market value. These lands will go to the Sierra Madre Foundation upon mine closure.
- d. **Training (Marlin Mine)**: Montana has provided vocational and technical training to many local indigenous residents to qualify them for technical jobs at the mine. In 2008, over 190 employees received vocational training for operations jobs, not including annual health and safety training.
- e. **Training (Vocational Training for Community Members)**: Fundación Sierra Madre (FSM, described in Section 8.2 of this AMR) has aligned with the Guatemalan government vocational training agency, INTECAP, to provide vocational training for a variety of MSME enterprises. During 2008, over 400 local residents attended FSM-sponsored training sessions and workshops and/or received technical assistance. Virtually all of these attendees were indigenous and more than half were women.
- **f. Micro-Lending:** The Marlin Mine, through FSM/FAFIDESS, supported 50 communal banks and solidarity groups during 2008, which had a total of 708 members, all of whom are indigenous women.
- 2. Investing in education, with priority actions to improve quality and access to pre-primary and primary education.

The Marlin Mine 2008 contribution to education included the following:

- a. During 2008 Montana funded salaries, benefits and supplies for 36 teachers in San Miguel Ixtahuacàn, Sipacapa and Malacatancito.
- b. In coordination with national, departmental and municipal education officials, FSM developed and implemented a three-pronged program to 1) develop a system of student achievement indicators, focusing on mathematic and language skills; 2) used the indicator system to test and evaluate a sample of 3rd and 6th grade students in communities near the mine; 3) developed and implemented a teacher skills improvement training program, in part focused on the results of the student achievement indicator evaluation; and 4) assisted local teachers in achieving certifications
- c. The 2008 Marlin Mine Community Development program included substantial funding for construction or improvements for schools in eight communities and supported two communities in the development of microcomputer training centers.

Perhaps the most significant contribution to education in communities near the Marlin Mine has been the stability provided by employment, which has allowed families to keep children in school. Since 2002, both school enrollment and the number of students who remain in school for the entire school year has increased substantially in all communities near the mine.

3. Investing in health, with an emphasis on expanding access and usage using both supply- and demand-side interventions.

Over the past several years both Montana and FSM have refocused their health care strategies; from direct provision of services to supporting the San Miguel Health Center and other local health care providers in the interest of local capacity building and sustainability. FSM's Marlin Mine 2008 health care activities included the following:

- a. Logistical and technical support for the local effort in the national campaign to eradicate measles and rubella, which achieved 95 percent immunization coverage.
- b. Support for systematizing and training midwives operating in the municipality.
- c. Support to the San Miguel Health Center in the development and implementation of a "Youth Talks About Sex" workshop, which was attended by 290 youth and 30 institutional representatives and members of the general public.
- d. Support to the Health Center in the development and implementation of the municipality's first "Baciloscopia Day," a day of free tuberculosis testing, during which a total of 36 samples were taken from area residents.
- e. Provided in-home health care services to individuals and services in 31 emergencies in cases where there were no health care providers in the municipality who could respond.
- f. Arranged for optometry and dental representative participation in the Municipal Health Fair, who provided 36 optometry consultations, 36 dental consultations and 140 fluoride treatments.
- g. Provided health education and prevention services to 148 students, 74 adolescents and 73 women
- 4. *Integrating actions to reduce malnutrition into the basic health-care package.*
 - a. FSM's 2008 health education and prevention program for women included training on prenatal care and early childhood nutrition.
- 5. Reducing isolation and improving communications by investing in rural transport and roads.
 - a. In addition to the 2004 construction of a bridge and major improvement to the road that leads from the Marlin Mine to Highway CA1, (Pan American Highway) and a bridge constructed by Montana to provide access to Sipacapa, Montana provided over US\$5 million to significantly upgrade and pave 20 kilometers of road providing access between San Miguel Ixtahuacán and the road that connects Concepción Tutuapa, Tejutla and eventually San Marcos, in response to a request from the Guatemalan Government and the Mayor of San Miguel Ixtahuacán.

This important road is used by residents to move people and products throughout the region. The improvement and paving of this road substantially reduced travel time from San Miguel to San Marcos, the departmental capitol, provided access to the

road from a number of communities not currently served, reduced wear and tear on vehicles and most importantly, provided a much safer roadway for local residents.

Paving of the road from San Miguel to Tejutla was completed during 2008. Paving of several kilometers of a loop road that provides access to the main road for a number of communities remains to be completed. Paving of the loop road is a commitment of the Guatemalan government and the San Miguel Ixtahuacán municipality, which is dedicating a portion of the royalties it receives from the Marlin Mine to the project.

- b. Montana's has provided funding, materials and in some cases in-kind assistance to communities for improvement of local roads since the mine was in the exploration phase. During 2008, the Marlin Mine Community Development program included support for road improvement and maintenance projects in four communities.
- 6. *Improving governance and the effectiveness of the public sector.*

Montana's contribution to improving governance and the effectiveness of the public sector has proceeded in two areas.

- a. Montana has promoted transparency by communicating the Marlin Mine tax and royalty payments in newspaper and radio announcements and on a large billboard in front of the Marlin Mine entrance.
- b. Through the Marlin Mine community development program, the Organizational Development Unit has supported communities in three municipalities in the planning and prioritization of projects at the community and municipal level and supported them in improving their infrastructure operations and maintenance skills.
- c. As part of their municipal and community capacity building program, FSM supported the municipality of San Miguel Ixtahuacán and communities in the municipalities of San Miguel Ixtahuacán and Sipacapa in their efforts to implement the *Ley de los Consejos de Desarrollo Urbano y Rural*, (Urban and Rural Development Council Law). During 2008, FSM's municipal and community capacity building efforts included the following:
 - 1. Supporting 6 communities in the municipality of Sipacapa and one in the municipality of Malacatancito by training community leaders in the elements of Guatemalan decentralization law.
 - 2. Supporting the Municipality of San Miguel Ixtahuacán in the formation of a Municipal Development Advisory Council (COMUDE). This intensive effort involved 60 communities in the municipality, six training sessions and culminated with the formal establishment of the COMUDE and appointment of nine working commissions to assist municipal authorities in planning community development projects.
- 7. Priority target groups for poverty reduction, including indigenous households and women.

Montana's achievements in this area include:

- a. At the end of 2008, a total of 964 residents of local communities worked at the Marlin Mine, almost all of these residents were indigenous.
- b. The residents of the area around the Marlin Mine who received health care services from FSM in 2008 were virtually all indigenous and many were women who received prenatal and maternal care and training.
- c. The participants in the FSM vocational training courses in 2008 were virtually all indigenous and more than half were women.
- d. The 708 members of the 50 FSM/FAFIDESS communal banks and solidarity groups supported by the Marlin Mine described in Priority Action # 1 above (*Promoting Economic Growth*) are all indigenous women. Along with the micro-credit program, training in leadership and management of the communal banks has led to greater participation of women in commercial activities in the area.

9.0 COMMUNITY/SUSTAINABLE DEVELOPMENT

9.1 Community Development Projects

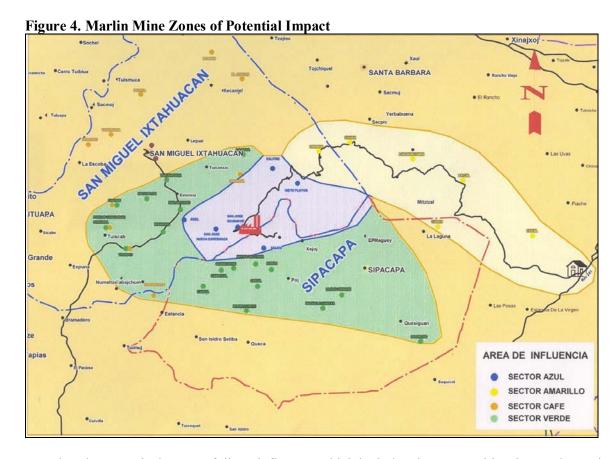
Montana provides resources and funds for selected community development initiatives in communities near the Marlin Mine and along the access road to the mine through the Organizational Development Unit of the Sustainable Development Department.

Marlin Organizational Development Unit and Community Development Funding

Established in 2005, the Marlin Organizational Development Unit (MODU) engages communities in the identification, prioritization and implementation of community development projects in the context of available resources including those from the Marlin Mine. During 2008, the MODU conducted its community grant cycle (described below), completed some projects begun in 2007, prepared profiles of some projects, conducted community diagnoses (evaluation and needs assessments) in selected communities and provided development training for some community officials.

Montana and the communities near the Marlin Mine use a geography-based system for allocating the major portion of company support for community development projects based on the intensity and types of potential impacts. The system also has some flexibility so that the company can consider and support emerging and urgent community development projects if the need arises.

The structure of the community development system is based on four zones of potential impact, which are color-coded (Blue, Green, Yellow and Brown) on a map as shown in Figure 4.



- The Blue Zone is the area of direct influence, which includes six communities that are located adjacent to the Marlin Mine and its activities: Agel, San Jose Nueva Esperanza, San Jose Ixcaniche, Salitre and Siete Platos in the municipality of San Miguel Ixtahuacán and Salem in the municipality of Sipacapa. These communities receive 40 percent of the annual community development budget for this geographic strategy.
- The Green Zone includes a second ring of communities located around the Marlin Mine that are indirectly affected by the mine and its activities. These communities receive 30 percent of the annual community development budget for the geographic strategy.
- The Yellow Zone includes communities located along the transportation route between the Marlin Mine and the Pan American Highway. These communities receive 20 percent of the annual community development budget for the geographic strategy.
- The Brown Zone includes the remaining communities in the municipalities of San Miguel Ixtahuacán and Sipacapa that may or may not be affected by the Marlin Mine and its activities. Development needs in these communities are identified in coordination with the municipal governments. These communities receive 10 percent of the annual community development budget for the geographic strategy. In 2008 Brown Zone projects were identified in discussions between the Organizational Development Unit and the Municipality of San Miguel Ixtahuacán. In Sipacapa, Brown Zone funding was redirected to the Green Zone for 2008.

During 2008 Montana met with communities in the Blue, Yellow and Green zones to get input on the community organizational development process. The elements of the process include:

- The COCODES (local development councils) and auxiliary mayors of each community identify, prioritize and select community projects.
- General guidelines establish the types of development projects Montana will fund.
- The community organizational development program is ongoing and phased multi-year projects are allowed and encouraged.
- Montana provides a set amount of funding each year for community development. It is up to the COCODES and Auxiliary Mayors to determine the distribution of that funding. Communities are encouraged to use Marlin Mine funding to leverage additional funding from the municipality and other sources. The funding level for the 2008 program was approximately US \$300,000 for all zones. Additional community development funds are separately allocated.
- A participatory community diagnosis or assessment process (involving the community from the beginning) is a key element of the Marlin Mine community development program. For example, during 2008, a total of 12 community diagnosis processes were carried out with the direct assistance of the Organizational Development Unit. The main purpose is to prepare communities to make community development decisions and to strengthen their ability to manage development processes. Additional community diagnoses and community development capacity-building processes were carried out by FSM and are described in the following section of this AMR.
- The MODU conducted five training sessions to support community officials in the improvement of preventative maintenance and corrective action skills for maintaining capital projects in their communities during 2008 and one training session for masonry skills. Preventative maintenance and corrective action training is an important element of the Marlin Mine Organizational Development Plan for neighboring communities.

The community organizational development process is intended to foster sustainable community development by strengthening local community planning, financing and implementation capacities.

Table 13 displays 2008 community development projects selected by the COCODES and auxiliary mayors in participatory community processes. Materials for these projects and in some cases a portion of the funding is provided by Montana. The communities also provide a portion of the funding and in some cases labor. The respective municipalities also provide materials and funding contributions for some projects.

	Table 13. Marlin Mine Community Development Projects for 2008					
No.	No. Community Project Type Status					
1	Agel	Reconstruction of the potable water system	Completed			
2	San José Nueva Esperanza	Construction of a new urban center (Auxiliary Mayor's office, meeting hall, school, playground and park) (see Attachment A)	Completed			

	Table 13. Marlin Mine Community Development Projects for 2008					
No.	Community	Project Type	Status			
3	San José Ixcaniche	Construction of community assembly hall	Completed			
4	El Salitre	Construction of a school with two classrooms	Completed			
5	Siete Platos	Construction of a community kitchen	Completed			
6	Chuena	Construction of a school classroom	Completed			
7	Chuen	Clearing of a terraced area	Suspended			
8	Horcones	Construction of a school classroom	Completed			
9	La Ciénaga,	Installation of 34 solar panels to provide home lighting; 17 were installed in 2008.	Completion date 2009			
10	La Cal	Support for the introduction of electric service	Completed			
11	Cùcal	10 % of the necessary support for the introduction of electric service	Completed			
12	San Antonio Los Altos	Construction of a community assembly hall	Completed			
13	Màquivil	Construction of a community storage room at the school	Completed			
14	Chilive	Computer lab and 15 computers	Pending training			
15	Subchal	Structural study for a Basic Institute building	Completed			
16	Chiniguitz	Potable water system study	Completed			
17	Cabajchun	Materials for the reconstruction of the potable water system	Completed			
18	Sícabe	Materials for the improvement of 3.5 kilometers of road	Completed			
19	Cancil	Construction of a potable water system in the La Planada sector	Completed			
20	Xeabaj	Improvement of 1.5 kilometers of a community road	Completed			
21	Pié de La Cuesta	Computer lab and 15 computers	Pending installation of a network			
22	San Antonio La Cruz	Construction of the an Auxiliary Mayor's meeting hall	Completed			
23	Pueblo Viejo	Support for the computer center, which was constructed in 2007	Pending award of Ministry of Education certification as a typing academy			
24	La Estancia	Support for the computer center, which was constructed in 2007	Pending award of Ministry of Education certification as a typing academy			
25	Town of San Miguel Ixtahuacán	Improvement of the municipal hall and gymnasium	In process			

	Table 13. Marlin Mine Community Development Projects for 2008					
No.	Community	Project Type	Status			
26	Legual,	Materials for the school walkway	Completed			
27	Ixchol	School building improvements	Completed			
28	Maravillas	Materials for reconstruction of an aqueduct	Completed			
29	Chico Zapote	Amplifier	Completed			
30	Chuena	Materials for remodeling the potable water system	Completed			
31	Kyaqjul, Máquivil	Buildings for community latrines	Completed			
32	Paraje Polimonte	Materials for remodeling the potable water system	Completed			
33	Chilive	Paint for the Basic Institute	Completed			
34	Màquivil	Paint for the school building	Completed			
35	Chininguitz	Remodel potable water aqueduct	Completed			
36	La Democracia	Improvements to the community market	Completed			
37	Ixcaíl	Remodel potable water aqueduct	Completed			

In September of 2008 the MODU created a complementary community development program to include communities located along the electric power transmission line from Tejutla to the Marlin Mine. The program, named Programa de Integración Comunitaria y Municipal "Ch'isb'il qanq'ib'il" in 2009, which in the Mam language means Creciendo Juntos (Growing Together), includes three elements:

- An individual plan, which has 460 beneficiaries, provides a variety of benefits including food vouchers, school scholarships and agricultural equipment and supplies to landowners along the transmission line right-of-way.
- A community plan, which includes the 13 communities traversed by the transmission line, includes three aspects:
 - o Prioritization, planning, implementation and evaluation of sustainable community development projects.
 - o The plan is carried out by community authorities, with technical and financial assistance from a local NGO.
 - o Social and accounting reviews of the projects are also conducted by the community and auditors from a local NGO.
 - o Financial support for the plan is provided by Montana.
- A municipality-level plan, which was only operational in San Miguel Ixtahuacán during 2008.

Table 14 displays projects initiated under the Ch'isb'il qanq'ib'il program during 2008 and their status.

T	Table 14. Marlin Mine Ch'isb'il qanq'ib'il Community Development Projects for 2008				
No.	Community	Project Type	Status		
	Tejutla				
1	Colonia las Manzanillas, zona 5	Purchase of a water source for the school	17%		
2	Loma Linda	Construct a potable water tank	75%		
3	El Mirador	Improvement of 2.5 km of road	100%		
4	La Fraternidad	Improvement of the health office	100%		
5	Las Delicias	Construction of a community kitchen	100%		
6	Las Hortalizas	Purchase of 6 cuerdas of land for a soccer field	30%		
7	Tejutla Town (Municipal Center)				
		Comitancillo			
1	San Jose La Frontera	Paving in front of school and community buildings	100%		
2	Paraje Cantzela	Construction of a community kitchen	100%		
	San M	Iiguel Ixtahuacán			
1	Sibinal	Construction of a community kitchen	85%		
2	El Triunfo	Purchase of pipe for community sewer	60%		
		System Health office equipment	100%		
3	Máquivil	Community warehouse and baths	80%		
4	Agel	Community center paving	100%		

2008 Education Funding

Montana also participates in education initiatives in communities near the Marlin Mine. As noted in section 6.0 of this AMR, Montana funded the salaries and benefits of 36 teachers during 2008: 23 in the Municipality of San Miguel Ixtahuacàn, 12 in the Municipality of Sipacapa and 1 in the Municipality of Malacatancito. This ongoing initiative was initiated during 2006 in response to request from the mayors of San Miguel Ixtahuacàn and Sipacapa, who are using municipal funds to pay for additional teachers. Table 15 displays the 2008 distribution of Montana-funded teachers and the total amount paid.

Table 15. 2008 Montana Teacher Funding						
Municipality Number of Teachers Number of Quetzales Number of Quetzales Montana Contributions/ Dollars						
San Miguel Ixtahuacán	23					
Sipacapa	12					
Malacatancito	1					
Total	36	Q.749	,147 US\$ 96,717			

During 2008, the Guatemalan Ministry of Education developed an initiative to improve the quality of education for Guatemalan children by increasing the number of teachers in schools. Although a number of additional teaching posts have been authorized, there is a funding lag. Some new positions have been funded while others have not. When this program is fully funded and the additional teachers are hired and installed in schools in communities near the mine, the

need for mine-funded teachers should be reduced and eventually eliminated, resulting in a sustainable solution for improvement of education resources in these communities. The Marlin Mine intends to continue supporting education in other ways and is planning to increase scholarships in 2009.

9.2 Sustainable Development: Fundación Sierra Madre

Information for this section was obtained from FSM's 2008 annual report, *Programa Integral de Desarrollo Comunitario – PIDEC - San Miguel Ixtahuacán & Sipacapa* and from other FSM documents and interviews with FSM staff. Information about FSM's organization and early initiatives is available in prior year AMRs and in the *Marlin Mining Project Indigenous People's Development Plan*, which are available on the Goldcorp Guatemala website.

FSM is a Guatemalan foundation founded with the specific mission to plan and implement sustainable, community-based, development and capacity building programs in the municipalities of San Miguel Ixtahuacán and Sipacapa. Managed and staffed by Guatemalans, it has become a part of the local community throughout the Municipality of San Miguel Ixtahuacán and in villages in the Municipality of Sipacapa near the mine site, and plays an integral role in building local capacity and promoting economic and community sustainability. FSM is based in San Miguel Ixtahuacán.

The FSM PIDEC (comprehensive community development program) has four main objectives:

- 1. Improve access to and quality of health services for men, women and children.
- 2. Improve economic opportunities through the development of micro and small rural businesses with commercial viability.
- 3. Promote environmental awareness.
- 4. Develop institutional capacity and visibility of Foundation Sierra Madre, its partners and strategic public institutions.

FSM Program Area: Health Care

FSM's health care program objectives include helping to position the San Miguel Ixtahuacán Health Center as the coordinating institution for health services in the municipalities of San Miguel Ixtahuacàn and Sipacapa, and contribute to the strengthening of the local health care system by improving access and quality of health care services for men, women and children

In recent years, the San Miguel Health Center has established itself as the primary health care provider in the area and received additional support from the municipality and the Ministry of Health. The San Miguel Health Center has added employees and contracted with two NGOs, CODI and PRODEC, which has improved access to health care for area residents. Beginning in 2007, FSM concentrated its health care activities on education and coordination. Also, as is mentioned in section 7 of this AMR, Montana and the Ministry of health agreed in 2007 to jointly upgrade the existing Health Center into a 24-hour/day permanent health center with additional services.

In the interest of sustainability and to avoid duplication of services, FSM has focused its activities on health education and community support. These services are oriented primarily toward mothers and children under five years of age, with the objective of reducing maternal and early childhood mortality, a substantial problem in the area. FSM also focused on health care education in area schools, with the objective of instilling good health care habits at an early age.

FSM's 2008 health care services were organized in the following areas.

Positioning the Health Care Center as the institutional leader for health care services in San Miguel Ixtahuacàn and Sipacapa

In Sipacapa, FSM worked directly with the COCODES, deputy mayors and teachers in he communities of Xeabaj, Carrizal, Cancil, Nueva Victoria and Canoj to provide health assistance and education activities. These included coordinating with the COCODE of Carrizal to hold a Health Day, which referred 15 community members to the Health Day organized by Helps International in Tejutla for specialized services, and coordinating with the COCODE in Xeabaj to hold the second Health Fair where 326 persons received specialized health care services. FSM's role in the Health Fair was to contact health care providers operating in the area and arrange for their attendance at the fair.

In San Miguel Ixtahuacàn, FSM supported the health care center in the following activities:

- Provided logistical and technical support for the local effort in the national campaign to eradicate measles and rubella. Through the work of the Health Center, ECO, CODI and the support of local organizations, 95 percent immunization coverage was achieved.
- Helped systematize the list of midwives operating in the municipality. A list was prepared
 that detailed the midwives, their associated organizations and training and compared the list
 to the records of the deputy mayors in the municipality. This effort led to a training workshop
 for midwives organized by the San Marcos Reproductive Health Unit of the Department of
 San Marcos.
- Supported the Health Center in the development and implementation of a "Youth Talks About Sex" workshop, which was coordinated with the San Marcos Departmental Reproductive Health Unit and the San Miguel Basic and Diversified Institute. The workshop was attended by 290 youth and 30 institutional representatives and members of the general public.
- Supported the Health Center in the development and implementation of the municipality's first "Baciloscopia Day," a tuberculosis-screening event held in the communities of Sícabe, El Pito, Subchal, Chilive, Los Domingos, Twikiakja, Maquivil and la Estancia, which took a total of 36 samples from patients.
- Presented health care information about the municipality including the principal cause of maternal and childhood death to the Municipal Council and the Deputy Mayors.

Inter-institutional Coordination

- FSM and the Health Center held a total of seven meetings with the Municipal Council to inform them about the internal reorganization, the progress on the design of the new Centro de Atención Permanente (CAP the new municipal health center) and the need to establish certain health preventative measures during the annual municipal fair.
- The Department of Health attended eight monthly meetings to discuss methodologies for the prevention of HIV/AIDS.

Health Assistance Services, Health Fairs and Preventative Services

- During 2008, FSM provided in-home health care services to some individuals who were unable to travel to the Health Care center or health care providers. Additionally, the Municipal Justice of the Peace and the Health Care Center referred a total of 31 emergencies to FSM in cases where there were no health care providers in the municipality who could respond.
- In support of the Municipal Health Fair organized by APROSAMI, FSM arranged for attendance by optometry and dental representatives. The optometry representatives provided 36 consultations, the dental representatives provided 36 consultation and 140 people received fluoride treatments.

Health Education and Prevention

The illnesses most prevalent in communities near the Marlin Mine such as diarrhea, respiratory and intestinal infections, skin problems, anemia and others can often be prevented through health education. To achieve the objective of reducing illness and mortality and help prevent illness, health education and prevention services were provided to three groups: Women, students and adolescents.

Topics addressed during 2008 with these groups included:

- <u>Women</u>: pneumonia, anemia, maternal lactation, common childhood illnesses, prenatal care, newborn care, vaccinations, nutrition and diarrhea.
- <u>Adolescents</u>: understanding adolescent hormonal, physical and psychosocial development, reproductive health, sexually transmitted immune system diseases, behavioral development and Seven Healthy Habits.
- <u>Children</u>: School, family dental and personal hygiene, and basic family environment.

Table 16 displays the number of women, adolescents and children attending the education sessions.

Table 16. 2008 FSM Health Education and Prevention Training Attendees						
Community	3 rd Grade	4 th Grade	5 th Grade	Adolescents	Women	
Xeabaj	23	18	0	30	15	
Nueva Victoria	15	6	5	8	12	
Carrizal	10	6	12	9	12	
Cancil	25	14	0	17	22	
Canoj	14	0	0	10	12	
Total	87	44	17	74	73	

FSM Program Area: Education and Training

The objective in this area is to provide support for improvement of teacher skills in communities near the Marlin Mine and to support training initiatives that expand local productive capacity and economic competitiveness.

Support local schools in the design of a system of student achievement indicators, focusing on mathematic skills at the primary level and language skills at the pre-primary level.

This program element had six elements.

- 1. Development of the indicator systems was initiated with a review of the following Guatemalan Ministry of Education documents:
- National Base Curriculum, Primary Level, Third Grade
- Curriculum Development Guidance, Sixth Grade of the Primary Education Level
- Mam Mathematics, Third Grade
- Mathematics 3, Guatemalan Series, Road to Excellence
- Learning Models, Third Grade Volume III & Sixth Grade Volume II
- Mathematics 6, Guatemalan Series
- Education Standards, Guatemalan Ministry of Education

Development of the Indicator System was based on the information and guidance resulting from the foregoing review. The Indicator System contains the following documents:

- Comparative and Explanatory Study of Achievement in Mathematics and Language
- 3rd & 6th Grade Progress Indicators
- 3rd & 6th Grade Mathematics Tests
- 3rd & 6th Grade Language Test Indicators
- 2. Preparation of 3rd and 6th Grade Specification Tables allowing comparison of general competency, performance indicators and achievement resulting from both the 3rd and 6th Grade Tests.
- 3. The FSM Director and technical coordinators in collaboration of the Director of the Department of Education determined that application of the indicator system would initially occur in schools that had teachers funded by the Marlin Mine and that 25 percent of students in 3rd and 6th grade would be tested.
- 4. Coordination with local Education authorities including the Technical Administrative Coordinators (CTAs) from San Miguel Ixtahuacàn and Sipacapa.
- 5. Development of the Evaluation Test for selected 3rd and 6th grade primary students.
- 6. Test administration, grading and evaluation of results.

In Sipacapa the tests were administered to 127 3rd graders and 72 6th graders, about 25 percent of the students in those respective grades in the municipality. In San Miguel Ixtahuacàn the tests were administered to 494 3rd graders and 319 6th graders, about 41 percent of the students in 3rd grade and 40 percent of the students in 6th grade in the municipality.

Analyses of test results allow the following general conclusions:

Mathematics:

- Increased competency was noted in basic mathematic calculations. However, when mathematical problems were presented in non-standard forms, a large part of the students were not able to resolve them.
- Although competency in the recognition of flat geometric figures was noted, such was not the case in recognition of solid geometric figures.
- Mathematical problem solving skills were not well developed, although problems were presented in a rather simple fashion, which indicates that students had not developed mathematical reasoning abilities.
- Skills involving decimal and fractional operations were weak.

Communication and Language:

- In the 3rd grade, problems were noted in reading comprehension and in writing legibility and spelling.
- In the 6th grade, students have better reading and writing skills; there were still problems with legibility and spelling.

The results were presented in workshops to the educational directors and teaching staff in each municipality, who were in agreement that the findings should be presented to education authorities as a basis for planning for improvements in these areas.

Develop an agreement with the Ministry of Education and PRONADE to implement a system of evaluation for teacher certification.

Representatives from the Ministry of Education, the CTAs from San Miguel Ixtahuacàn and Sipacapa and the Educational Development Unit were contacted to present a proposed program of teacher skill strengthening that included the following three elements:

- To improve the teaching skills of the teachers hired by the mine;
- To extend the teacher skill training to other teachers in the school system; and,
- To produce teacher training material to support the skills improvement effort.

Teaching skills improvement training program

Upon receiving approval and support from the municipal and departmental education authorities, the teacher-training program was initiated with a series of workshops as shown in the following table.

Table 17. 2008 FSM Teacher Training Workshops					
Workshop Topics	Teac	of chers ipating SIPA			
National Base Curriculum; Physical Education; Esthetics, Communication and Language; Educational Planning and Evaluation	25	11			
Strategies for teaching and learning language in primary school	35	06			
Classroom visits	22	04			
Monthly planning meetings	26	04			

Table 17. 2008 FSM Teacher Training Workshops		
Strategies for improving reading and writing in primary schools	06	00
Methods of reading and writing "Significant Expressions"	11	06
Development of materials for reading and writing	00	03
Presentation of the Technical Document "25 Planning Sessions"	15	07
Training in handicrafts and artistic expression	18	00

FSM Program Area: Economic Development

The FSM PIDEC objective for economic development is "To improve economic opportunities through the development of micro and small rural businesses with commercial viability."

Rural Business Collectives: Coffee Production and Associated Commercialization

Based on the findings of rural diagnosis (essentially an economic potentials and needs assessment inventory) process conducted in San Miguel Ixtahuacàn in 2006 and a productive diagnosis for coffee growing and production carried out by FSM in San Miguel Ixtahuacàn and Sipacapa during 2007, local farmers began developing a communal coffee business in April of 2008, with support from FSM.

These associated businesses and collective plant organized for the following purposes:

- Improve the technical and productive management of the currently established plantations.
- Improve productivity of the currently established plantations.
- Improve the quality of the soil and implement agricultural practices that improve the environment.
- Promote the organization and associated commercialization of coffee production.
- Develop a quality product to promote internal consumption.

The coffee growers and FSM selected La Asociación de Cooperación al Desarrollo Integral de Huehuetenango (ACODIHUE), a Huehuetenango based NGO to help them with technical training as well as formation and organization of the collective. A covenant of cooperation was signed with ACODIHUE and the following process was initiated:

- Identification and selection of six participant communities for the first phase, which include the communities of Los Horcones, Siete Platos, Legual, La Estancia, Xeabaj y Carrizal
- Organizing the established coffee growers in these communities.
- Providing a total of 18 training sessions and technical support on the following topics:
 - o evaluation of each plantation
 - o organic fertilization practices
 - o internal control systems
 - o developing a fertilizer application monitoring system and implementation of a registry
 - o managing insects and disease
 - o Production planning and marketing
 - o Coffee processing and visits to different processors.

A total of 124 growers (124 men and 18 women) participated in these training sessions. The participating producers from the two municipalities formed an organization, ASDECAFMU, selected a provisional board of directors and production and organizational promoters.

Rural Enterprise Business Development

FSM collaborated with INTECAP to provide technical and business management assistance for 28 bakery, masonry, pastry-making and brick-making enterprises in San Miguel Ixtahuacàn and Sipacapa. The objective of this effort was to improve business management and recordkeeping skills. Table 18 displays 2008 FSM/INTECAP Rural Enterprise Development technical assistance activities and participants.

Table 18. 2008 FSM - Facilitated Business Development Activities and Participants					
Activity	Number of Participants				
Activity	Sipacapa	San Miguel	Total		
Inventory analysis	4	6	10		
Definition of capital investment	2	9	11		
Analysis of current profit	1	7	8		
Managerial diagnosis	4	11	15		
Initial monitoring report	3	6	9		
Cost of production analysis	26	33	59		
Cost of sales records consultation	26	35	61		
Cost of purchases records consultation	24	33	57		
Month-end sales/purchases	3	14	17		
consultancy					
Management technical assistance	0	1	1		
Initial knowledge assessment	1	13	14		
Final knowledge assessment	1	12	13		
Technical assistance	3	17	20		
Submission of technical assistance	3	6	9		
studies					
Business analysis reports	1	0			
Service analysis and assessment	1	0	1		
Accounting analysis	0	1	1		
Total services offered to enterprises	104	209	313		

Micro-lending

The partnership between FSM and FAFIDESS resulted in the opening of 10 new communal banks during 2008, adding 59 new women members who received Q.540,000 (US\$69,715) in loans. Since its inception, the FSM/FAFIDESS micro-lending program has established a cumulative total of 50 communal micro-lending banks and one solidarity group serving 708 women and providing access to over Q.3,900,000 (US\$504,000) in capital. Table 19 below displays information about the FSM/FAFIDESS communal micro-lending banks, organized by lending cycle.

	Table 19. 2008 Status, FSM/FAFIDESS Communal Micro-lending Banks					
No. of Banks	Communal Banks	Women Associates	Bank Development Cycle	Current Capital	Amount Saved	
		San Miguel	Ixtahuacán			
5	Mubel, Centro Subchal y Maquivil III (Shanshegual y Mirando al Futuro)	60	I	Q.284,900.00	Q. 36,055.55	
8	Florecitas, Loma Linda, La Montañita, Cipresal, Nueva Esperanza, Lamaca, Flor de Orquída, el Frutal	86	II	Q.448,499.68	Q.9,845.27	
5	Libertad, Manantial, Cabajchun, Rosas de Saron y La Estancia	89	III	Q. 501,500.00	Q.16,695.63	
3	La Cúspide, Plan Subchal y las Esperanzas	36	IV	Q.201,000.00	Q.5,746.11	
2	Bethania Y Tierra Blanca	46	V	Q.276,500.00	Q.13,732.46	
1	Siénega	12	VI	Q.65,000.00	Q.5,300.00	
4	El Arenal, El Ladrillero, Centro de Chilive y La Peña	68	VII	Q.418,500.00	Q.47,045.00	
5	El centro de la lima, Mujeres de Sibinal, Mujeres de Legual, El centro de máquivil y la Patria	73	VIII	Q.457,500.00	Q.71,596.27	
2	Socias de Chilive y Maquivil I	36	IX	Q.263,000.00	Q.22,763.00	
35	San Miguel Subtotal	506		Q.2,916,399.68	Q.228,799.29	
		Sipa	сара			
3	La Margaritas, Centro I y Centro Sipacapa	37	I	Q.133,500.00	Q.4,849.74	
4	El Valle, Los Encinos, Flor de Duraznoy Roca de San Pedro	46	П	Q.188,500.00	Q.5,076.00	
4	Mujeres de San Antonio, El Jardin, Bella Vista y El Mirador	58	III	Q.319,500.00	Q.10,218.39	
1	Las Manzanas	21	IV	Q.103,000.00	Q.1,126,00	
2	Buena Vista y Mujeres de Tres Cruces	30	VI	Q.165,000.00	Q.13,407.63	
1	Pueblo Viejo	10	IX	Q.75,000.00	Q.6,980.25	
15	Sipacapa Subtotal	202		Q.984,500.00	Q.41,658.01	
50	TOTAL	708		Q.3,900,899.68	Q.270,457.30	

One element of the FSM/FAFIDESS partnership is the improvement of the enterprises for which the associates use the funds. During 2008, the training cycle was initiated with an assessment of each new associate's living conditions and business. As a result of these assessments, FAFIDESS provided home visits technical assistance and workshops for the proper management of poultry, hogs and livestock. Table 20 below lists FAFIDESS associate support activities and the number of participants.

Table 20. Micro-lending Bank: 2008 Associate Support Activities							
				Number of Participants			
Community	Type of Assistance	Training	Technical	Home			
		Workshops	Assistance	Visits			
La Libertad	Proper poultry management	14	09	04			
Aldea El Triunfo,							
Máquivil y San José	Proper hog management	49	37	1			
Nueva Esperanza							
Aldea Máquivil y	Proper cattle management,						
San José Nueva	phases I & II	68	51	21			
Esperanza							

Additionally, FSM/FAFIDESS provided a number or workshops to help improve the associate's business management skills and capabilities. Table 21 provides a description of the workshops provided and the number of associates who attended.

Table 21. 2008 Communal Micro-lending Bank Business Management Workshops					
Workshop Title	Number of Participants	Participating Communal Banks			
Market commercialization	42	El Frutal, Lamaca, Rosas de Saron, La			
Client Service	38	Estancia, La Libertad, Mujeres de Legual, Centro de Chilive, Socias de			
Publicity and promotion	39	Chilive			
Seeking Dialog	48	Pie de la Cuesta, Centro Uno, El Jardín y Centro de Sipacapa			

During 2008 FSM/FAFIDESS trained a group of "Livestock Promoters" in advanced management of poultry, hogs, sheep and cattle. In order to assist the associates in the management of these livestock, this training included methods for raising bigger and better livestock and the use and management of medicines and vaccines. The group supported the communal banks in the communities of Legual, La Libertad, Máquivil and Chilive by holding vaccination and parasite elimination days for the associates' livestock.

Each participant in the technical/business-training program participated in an evaluation of the associate's initial and post-training livestock sales, in order to evaluate the effectiveness of the training. Table 22 displays the results of that evaluation.

Table 22. 2008 Communal Bank Associates Livestock Sales Evaluation Results			
Number of associates evaluated	96		
Evaluation period	August – November 2008		
Associates that reported and increase in sales	11%		
Average increase in sales	88%		
Associates reporting sales during the evaluation	35%		
period			
Associates who invested their credit	66%		
Economic activities that showed improved	Principally poultry and hog breeding		
sales			
Economic activity that showed less capital	Cattle raising – less than 36% of associates		
turnover	invested in this activity		

Computer Center Capacity Building

During 2008, FSM provided technical support to the two-microcomputer centers that had been established as part of the Marlin Mine Community Development Program in the communities of Pueblo Viejo and Estancia in the Municipality of Sipacapa. The two centers awarded diplomas to a total of 80 trainees during the three-month September through November period. Both centers had positive financial balances at the end of 2008 and both have applied for certification in microcomputer training with the Guatemalan Ministry of Education.

FSM Program Area: Support for Municipal and Community Capacity Building

The objective of the community capacity building element of the FSM program is to support municipal and community governments in their efforts to strengthen their capacities to plan, implement and operate sustainable community policies and projects. FSM community capacity building exercises are carried out in coordination with activities of the Marlin Mine Organizational Development Unit, national and departmental governmental agencies and other NGOs with a local presence.

Since 2004, FSM has supported the Municipality of San Miguel Ixtahuacán and communities in the municipalities of San Miguel Ixtahuacàn and Sipacapa in their efforts to implement the *Ley de los Consejos de Desarrollo Urbano y Rural*, (Urban and Rural Development Council Law), which was drafted by the Guatemala government to promote decentralization and local participation in development matters.

Two key elements of the aforementioned law are the formation and operation of COMUDES Municipal Development Advisory Councils) and COCODES (Community Development Advisory Councils). FSM 2008 efforts focused on supporting COCODES in selected

communities in the Municipality of Sipacapa by facilitating training sessions and by supporting the Municipality of San Miguel Ixtahuacán in the formation of a COMUDE.

Community Capacity Building support in Sipacapa: Training community leaders in the elements of Guatemalan decentralization law

By the end of 2007, FSM had conducted community evaluation and needs assessment and prioritization activities in the communities of Cancil, Xeabaj, Nueva Victoria, Chual, Canoj and El Carrizal, all in the Municipality of Sipacapa, Department of San Marcos and in the community of Los Horcones la Cal in the Municipality of Malacatancito, Department of Huehuetenango. During 2008 the foundation followed up with these communities to deliver the results of these processes and to organize training sessions for community leaders.

Sipacapa communities participating in the 2008 capacity building exercises included Xeabaj, El Carrizal, Cancil, Nueva Victoria, Canoj and Paraje los López. The purpose of the 2008 training program was to build local leader's capacity to conduct community business. Table 23 below displays the training modules offered in Sipacapa and numbers of attendees.

	Table 23. 2008 Community Capacity Building Training: Sipacapa			
Number	Number Training Topic			
1	Design and validation of the final participatory rural diagnostic documents	22		
2	Information about Development Council law, Decentralization law and the Municipal Code, emphasizing articles that are the responsibility of the COCODES (Community Development Councils), auxiliary mayors and communities	8		
3	Assessment of the current situation of COCODES	15		
4	Project formulation	15		
5	Preparation and editing of basic management and administration documents	23		

Municipal capacity building support in San Miguel Ixtahuacán: Formation of a Municipal Development Advisory Council

FSM's 2008 community capacity building process in the Municipality of San Miguel Ixtahuacán began with an evaluation of the of the current state of the COCODES in the communities of Salitre, Agel, San José Nueva Esperanza, San José Ixcaniche y Siete Platos. Information concerning the decentralization laws was also presented at this meeting, which was attended by 28 community leaders including four representatives of the municipal council and community leaders from la Estancia and la Peña.

This initial event generated substantial interest among the municipal authorities; so much so that they asked for and signed a cooperative agreement between the municipality and FSM to expand the capacity-building training process to include 60 communities in the municipality.

As shown in Table 24, the subsequent training process included six phases. The end result of this process was that the municipality formed and organized a COMUDE and provided training for members of the COMUDEs and COCODES with support from FSM.

Table 24. 2008 Community Capacity Building Training: San Miguel Ixtahuacán						
Number	Number Training Topic		No of Participants by Region			
		I	II	III	IV	V
1	Assessment of the current situation of COCODES: • Election dates, composition, participation of women	69	60	54	59	50
2	 Municipal participation law Political constitution of the Republic Development Council law Decentralization law & regulations Municipal code 		42	57	69	40
3	Basic document preparation • Fiscal records		48	48	48	40
4	 Second level COCODE organization Each community selected a representative for the 2nd level COCODES Board of Directors Officers were elected Each region appointed 4 representatives to the COMUDE (Municipal Development Council) The process was recorded by the Secretary of the Municipality and entered into the civil registry 	66	78	52	74	40
5	 COMUDE Organization In addition to the 20 regional COCODE representatives, the organizational meeting included 24 institutional representatives and a total participation of 75 people The COMUDE appointed nine working commissions, each headed by a government official, COCODE member or official of an NGO with a presence in the municipality. 	04	04	04	04	04

Integrating communities into the Rural Development Program

FSM's support in this program area was focused on three efforts.

- Supporting the communities of La Cumbre, Twikiakja and Las Escobas in developing project profiles for an extension of electric power service, construction of a community meeting hall and construction of a school building. These profiles were for use in grant applications to be submitted to the Japanese Embassy, the San Marcos CODEDE and the Office of the Executive Secretary to the President of Guatemala.
- An analysis of principal economic activities, employment opportunities and development opportunities carried out in collaboration with members of the COCODES of 47

communities. Table 25 below displays the resulting data on principal economic activities from the study.

Table 25. Principal Economic Activities in 47 Communities in San Miguel Ixtahuacán				
Economic Activities	Number of Persons	Percent		
Agriculture	5,996	49%		
Persons who travel to the coast to work on fincas (principally coffee)	2,816	23%		
Persons who have migrated to the United States	661	5%		
Masons & brick layers	429	4%		
Day laborers	476	4%		
Teachers	291	2%		

 Support to the Municipality of San Miguel Ixtahuacán in the development of a proposal for expansion and improvement coffee production and commercialization for communities with established coffee growing operations. This proposal was submitted to the San Marcos Program for Progress for potential funding.

Community Advisory Councils

In 2008, FSM continued to focus on expanding and strengthening membership in the Community Advisory Councils (CADEC) and integrating them into the planning and program evaluation processes. FSM held two CADEC meetings during 2008.

FSM Role in Marlin Mine Closure and Disposition of Mine Properties and Installations

- Montana has committed publicly to donating the Marlin Mine lands to the Sierra Madre Foundation as part of the mine closure.
- While the process plant and tanks will be removed, the electrical line to the property, the offices, workshops, cafeteria and housing on the Marlin Mine property will be given to the Sierra Madre Foundation.
- Consideration and planning with the people of San Miguel Ixtahuacán and Sipacapa regarding the best uses for the installations will take place well in advance of mine closure.

10.0 ENVIRONMENTAL AND SOCIAL MANAGEMENT CAPABILITY

Goldcorp Inc., the parent company of Montana Exploradora de Guatemala, S.A., issued a corporate *Environmental and Sustainability Policy* in 2008 (see Attachment B). Montana is in the process of reviewing Marlin Mine environmental and social management policies and systems to ensure compliance with corporate policy.

10.1 Environmental and Social Management Systems

Marlin Mine Environmental Management System

The Marlin Mine Environmental Management System (EMS) is intended to promote continuous improvement in environmental management. The EMS implementation is concentrated into four phases including:

- 1. Policy & Planning,
- 2. Implementation,
- 3. Evaluation, and
- 4. Review & Improvement.

Phase I – Policy & Planning

Phase I of the Marlin EMS has been completed and includes a Policy Statement signed by the General Manager. However, the Policy Statement will be updated during 2009 so that it continues to reflect current conditions. Under the EMS, environmental management plans (EMPs) for the following subjects have been completed:

- 1. Flora and fauna,
- 2. Sediment & erosion control,
- 3. Dust control,
- 4. Materials and waste management,
- 5. Environmental monitoring.

Phase II - Implementation

Phase II of the Marlin EMS has also been completed. The Policy Statement is posted in the applicable areas of the mine. Additionally, drafts of the various EMPs were submitted to the affected area managers for their comments. After addressing the comments, the EMPs were finalized and distributed to the management team. The EMPs have become part of the contract documents for significant work that will be done at Marlin by third parties. Standard contract language specifies that third party contractors are expected to comply with the EMPs.

Phase III - Evaluation

An internal inspection system was implemented to review each operating area for compliance with the EMPs using agreed-upon critical performance indicators (CPIs) for each department. These inspection reports are kept on file within the Marlin Mine Environmental Department.

Phase IV - Review and Improvement

Phase IV of the Marlin EMS was determined to occur through two principle mechanisms: inclusion of environmental CPIs into the production bonus system, and a quarterly environmental

performance review by the management team. CPI performance was tied to the production bonus system by department and continues as such. Environmental performance reviews are conducted, but are still relatively informal. The 2009 focus will be on implementing a more structured and documented management review of environmental issues.

Marlin Mine Sustainable Development Management System

Although the Social/Sustainable Development Management System (SDMS) for the Marlin Mine was initially scheduled for completion during 2008, revisions to and expansion of the SDMS to include municipalities and communities located along the mine's electric power transmission line delayed completion of the SDMS until 2009. The SDMS is intended to promote continuous improvement in the sustainable development efforts of the Marlin Mine. The SDMS is concentrated into four phases including:

- 1. Policy & Planning
- 2. Implementation
- 3. Monitoring
- 4. Evaluation, Review & Improvement

Phase I

Phase I of the Marlin SDMS is being drafted. It will include a Policy Statement signed by the General Manager. The sustainable development management plans (SDMPs) are under preparation. SDMPs for the following subjects will be prepared:

- 1. Community Relations,
- 2. Organizational Development and Community Projects,
- 3. Liaison with the Sierra Madre Foundation,
- 4. Liaison with external organizations such as national & international NGOs, national and foreign governmental agencies and other interested groups and organizations.

Phase II

The final Policy Statement will be signed and clearly posted in the applicable areas of the mine. This statement will be reviewed and approved by the management team. Additionally, drafts of the various SDMPs will be submitted to the area managers and supervisors for their comments. After addressing the comments, the SDMPs will be finalized and distributed to the management team. The SDMPs will become part of the commitment of Montana to the surrounding communities. Contractors hired to work for the Sustainable Development Department will be expected to comply with the SDMPs, which will be a standard part of contracts.

Phase III

Phase III of the Marlin SDMP will be implemented in 2009.

Phase IV

Phase IV of the Marlin SDMP will be implemented in the first quarter 2009. This will include regular meeting of the senior management to review sustainable development performance. Any issues and concerns raised will be discussed and measures to improve performance developed and implemented.

The Sustainable Development Department has continued to consult with local community leaders, independent consultants and others on the department's performance during preparation of the plan. These consultations will be continued as part of compliance with the final plan. It is anticipated that the SDMS will undergo continuous development and improvement over the life of the Marlin Mine.

10.2 Marlin Mine Environmental and Sustainable Development Staffing

Environmental Department Staffing

The 2008 status of the Marlin Environmental Department professional and technical staff is shown in Table 26.

Table 26. 2008 Marlin Mine Environmental Department Staff				
Position	Individual	Reports To		
Regional Environmental Director – Central & South America	Lisa Wade	Regional Vice President		
Environmental Manager	Peter Hughes	Marlin General Manager		
Environmental Superintendent	Gustavo Gomez	Environmental Manager		
Environmental Chief	Ismael Mancilla	Environmental Manager		
Environmental Chief	Jose Carlos Quezada	Environmental Manager		
Environmental Chief	Oliver Cano	Environmental Manager		
Environmental Supervisor II	Géser Gonzalez	Env Chief		
Environmental Supervisor I	Marvin Mejia	Env Chief		

In addition to these professional and technical staff, there are 38 unskilled employees in the Marlin Mine Environmental Department.

Sustainable Development Department Staffing

The 2008 status of the professional staff within Marlin's Sustainable Development Department is shown in Table 27.

Table 27. 2008 Marlin Mine Sustainable Development Department Staff				
Position	Individual	Reports To		
Regional Director for Sustainable Development - Central and South America	James Schenck	Vice President for Central and South America		
Manager for Sustainable Development	Alan Ovalle	Marlin General Manager		
Information & Documentation Technician	Filogonio Gómez	S.D. Manager		
Sustainable Development Superintendent	(recruiting)	S.D. Manager		
Administrative Assistant	Grisela Nohemí Villatoro	Superintendent		
Infrastructure Supervisor	Jorge Mario Godinez	Superintendent		
Community Relations Supervisor	Fausto Rodríguez	Superintendent		
Municipal Relations Coordinator San Miguel	Jeremías Pérez	C.R. Supervisor		
San Miguel Information Office Manager	Celia Carrillo	San Miguel M.R. Coordinator		
Community Relations Promoters San Miguel	Four employees	San Miguel M.R. Coordinator		
Municipal Relations Coordinator Sipacapa	Francisco Ambrocio	C.R. Supervisor		
Sipacapa Information Office Manager	Sandra López	Sipacapa M.R. Coordinator		
Community Relations Promoters Sipacapa	Three Employees	Sipacapa M.R. Coordinator		
Organizational Development Supervisor	Flora Emidia Macario	Superintendent		
Transmission Line Program Coordinator	Amner Aguilar	O.D. Supervisor		
Transmission Line Program Promoter	Two Employees	C.R. Supervisor		
Transmission Line Program Technician	Two Employees	T.L. Program Coordinator		
Community Relations Supervisor for Exploration	Keneth Müller	S.D. Manager		
Community Relations Promoter for Exploration	One Employee	C.R.E. Supervisor		
Coordinator for Land Acquisition	David Rodríguez	S.D. Manager		
Maintenance & Logistical Support	One Employee	Administrative Assistant		

10.3 Sustainable Development Department Training

Table 28 displays Marlin Mine 2008 Sustainable Development Department staff training.

Table 28. 2008 Marlin Mine Sustainable Development Department Training			
Training Attendees			
Inter-Group Relations, Communication and Capacity-Building	Community Relations Promoters (12)		
Industrial Fire fighting	4		
Microsoft Office 2007	8		

Table 28. 2008 Marlin Mine Sustainable Development Department Training			
Training Attendees			
Leadership Skills	18		
Introductory Course and Certification in Construction C, Grade Concrete Testing	1		
Public Information Training	18		
Spokesperson Training	1		

11.0 ENVIRONMENTAL PROGRAM MONITORING

11.1 2008 Environmental Permit Status

The 2008 status of Marlin Mine permits are shown in Table 29.

Table 29: 2008 Status of Marlin Mine Permits				
PERMIT, RESOLUTION OR LICENSE	DURATION	DATE OF RENEWAL	OBLIGATIONS OR BONDS	
Mining Exploitation License MEM	November 27th, 2003. On November 18th, 2005 an extension request was presented to MEM and it was resolved on February 1, 2006, authorizing zinc, lead, iron, copper and mercury as well as the previous gold and silver.	Year 2028	Annual tax payments, royalties, annual report.	
Annual Sworn Declaration for Royalty Payment MEM	Annually for the period of January to December. The SD for calendar year 2008 was presented to the MEM on January 30th, 2009.	The first 30 days of each year.	Present invoices and support of the yearly exports.	
Marlin I EIA&S Approval MARN	The period of time that the Marlin Mine is functioning, starting on September 29th, 2003.	NA	Annual Environmental License and compliance with environmental commitments in the EIA&S and approval resolution from MARN.	

Table 29: 2008 Status of Marlin Mine Permits				
PERMIT, RESOLUTION OR LICENSE	DURATION	DATE OF RENEWAL	OBLIGATIONS OR BONDS	
Powder Magazine License (Peridot, S.A.) MDN	Annual, first issued on September 30th, 2005.	On Wednesday, January 28th, 2009 the inspection of the powder magazines was performed by Captain Aroldo Castro and CIEG's specialist Carlos Santos, prior to extending the license through 2009.	Bond Q.441,034.00 In favor of MDN Policy No. 26847 El Roble Storage Bond Bond Q.13,500.00 In favor of MDN Policy No. 30353 El Roble Transportation Bond	
Dosimetry Agreement DGE	Indefinite, starting on August 20th, 2005.	Renewal on December 30th, 2008. Paying 12 months of service up to December 2009.	Annual Payment of \$600.00	
Environmental License MARN	Annual, first issued on January 27th, 2006.	First renewal from August 30th, 2006 to August 8th, 2007. Second renewal from August 9th, 2007 to August 8th, 2010.	Renewal of bond C-6 26561 Q.400,000.00 El Roble, to MARN Renewal of bond C-6 26561 with a voluntary bond increase of Q.3,000,000.00, in favor of MARN (3 year duration until August 8 th , 2010).	
Surveillance and Follow-up License MARN	3 years starting on August 9th, 2007 and ending August 8th, 2010.	August 8th, 2010	With the cost of such license of Q15,000.00 for a 3 year period, MARN will verify with its technicians the progress and compliance of the environmental commitments established in the Marlin EIA&S resolution.	

Table 29: 2008 Status of Marlin Mine Permits				
PERMIT, RESOLUTION OR LICENSE	DURATION	DATE OF RENEWAL	OBLIGATIONS OR BONDS	
Technical Closure Agreement MEM	Indefinite, starting September 6th, 2005.	First bond No. 26734 from September 8th, 2005 to September 7th, 2006. First bond renewal, from September 8th, 2006 to September 7th, 2007. Second bond renewal, from September 8th, 2007 to September 7th, 2010.	Maintain a bond in effect for 1 million dollars renewable annually until the MEM provides a Successful Technical Closure resolution to Montana.	

Table 29: 2008 Status of Marlin Mine Permits				
PERMIT, RESOLUTION OR LICENSE	DURATION	DATE OF RENEWAL	OBLIGATIONS OR BONDS	
Forestry Licenses (Peridot, S.A.) INAB	1. DR-VI-016-M-2004 Marlin I Forestry Management Plan 2. DR-VI-016-M-2-2004 Implementation of Operational Plan II 3. DR-VI-016-M-3-2004 Implementation of Operational Plan III 4. DR-VI-016-Cu-2005 Electric Line Tejutla- Marlin I 5. DR-VI- 022-Cu-2005 Marlin I Interior road — Modified by resolution No. BI -2-031-2006-Cu., dated October 3rd, 2006 (field) 6. DR-VI-022-Cu-2005, Marlin I interior road, July 2nd, 2007. 7. MODIFICATIONS TO THE FORESTRY PLAN RES. 62-1205- 039-1.1-2008, DATED OCTOBER 28TH, 2008. 8. MODIFICATIONS TO THE SOIL USE CHANGE PLAN RES. 62-1205-040-1.6-2008, DATED OCTOBER 28TH, 2008.	Marlin's main license has a 16-year duration (2020), for the implementation of the Forestry Management Plan, its last phase starting on April 30th, 2004.	Comply with the reforestation commitments established in the forestry management plan and keep the bonds in effect in each working shift. BONDS: (sequential with the license) 1. No. 24278, in effect from April 26th, 2004 to October 31st, 2010 in the amount of Q.1,240.967.2 0 2. No. 26330, in effect from June 14th, 2005 to October 31st, 2011 in the amount of Q.858,228.80 3. No. 28108, in effect from March 23rd, 2006 to October 31st, 2012 in the amount of Q.496,496.00 4. It does not have a bond. 5. No. 27170, in effect from November 3rd, 2005 to October 2011 in the amount of Q.13,596.00	

Table 29: 2008 Status of Marlin Mine Permits				
PERMIT, RESOLUTION OR LICENSE	DURATION	DATE OF RENEWAL	OBLIGATIONS OR BONDS	
Operational License Fuel Station with an approximate 114,800 diesel gallons capacity DGH	Indefinite starting on April 13th, 2007.	NA	1. Civil responsibility insurance in the amount of Q.300,000.00; renewed annually. 2. Send monthly to the Engineering and DGH Operations Department the inventory, local sales, consumption, sources and product dispositions forms.	
License for the modification of the facilities of the site fuel station. DGH	On November 11th, 2008, DGH authorized the MODIFICATION LICENSE FOR THE FACILITIES OF FUEL STATION of Marlin, for 1 year, extended. 2 diesel tanks of 25 thousand gallons each. At the end, 9 diesel tanks with a 157,400 gallons capacity will exist.	NA	NA	
Major Electricity User Resolution MEM	Indefinite starting on April 18th, 2006.	NA	Obligations to AMM, ETCEE and companies that supply power and energy.	
Operational License for Industrial Monitors (Medidores) DGE	Starting on November 4th, 2005 until November 14th, 2010.	NA	Inform about the decommissioning of nuclear monitors and send them back to their country of origin when the mine operation is finished.	

Table 29: 2008 Status of Marlin Mine Permits				
PERMIT, RESOLUTION OR LICENSE	DURATION	DATE OF RENEWAL	OBLIGATIONS OR BONDS	
EIA Fuel Station Approval MARN	Indefinite starting on June 2nd, 2005.	NA	Comply with the environmental commitments established in the resolution.	
EIA Electric Transmission Line Approval MARN	Indefinite starting on October 26th, 2004.	NA	Comply with environmental commitments.	
Importation Resolution for Sodium Cyanide MARN	Indefinite starting on July 26th, 2005.	NA	Report to MARN each sodium cyanide shipment that enters Guatemala.	
Importation and Use Resolution for Chemicals MSPAS	Indefinite, starting on October 5th, 2005.	NA	Monthly reports to the Ministry of Health, establishing the volume of consumption of such precursors.	
EIA Approval Resolution for the Construction and Operations of Marlin I Electric Sub-station MARN	Indefinite starting on May 27th, 2005.	NA	Comply with environmental commitments.	
Licenses for Radioactive Equipment Operators and Radiological Protection Supervisors DGE	Starting October, 2005	The DGE issued a resolution dated February 5th, 2008 approving the RENEWAL of the operators' licenses for a two-year period that ends on February 6 th , 2010.	Deliver dosimeters monthly for radiation levels analysis on behalf of DGE. Annual payment of dosimetry agreement.	

Table 29: 2008 Status of Marlin Mine Permits				
PERMIT, RESOLUTION OR LICENSE	DURATION	DATE OF RENEWAL	OBLIGATIONS OR BONDS	
Resolution Number 0005-2007, extended by the General Directorate of Civil Aeronautics (DGAC). NUEVA ESPERANZA AIRFIELD.	From April 13th, 2007.	Indefinite	 Accredit the cancellation for the inscription right in the National Aeronautic Registry. Strictly observe the OACI regulations. Signaling of the airfield and allow DGAC inspections. 	
Residual Waters Technical Study (dated May 2007) MARN	Indefinite	Study update every 5 years, according to Article 10 of the Residual Waters Reuse and Discharge Regulations.	 Keep a hard copy of the study in the Marlin Mine. Allow the entrance of MARN technicians to verify the study. In the case of Marlin, the study will be updated regularly based on the discharges to receptor bodies (possibly quarterly reports). Comply with the regulation. 	

Table 29: 2008 Status of Marlin Mine Permits						
PERMIT, RESOLUTION OR LICENSE	DURATION DATE OF RENEWAL		OBLIGATIONS OR BONDS			
Resolution No. 1114-2007/ECM/KC approved the EIA for LA HAMACA MARN	The Resolution is indefinite; the associated environmental license and bond is renewed periodically.	July 12 th , 2010 renewal of environmental license and bond associated with the resolution.	recommendations stated in the approval resolution were complied with, by sworn declaration and a low impact environmental evaluation for the incinerator and the mercury recovery was presented to MARN on July 18th, 2007. Environmental monitoring and environmental reports for MARN.			
Environmental License No. 0496- 07/DIGARN for the WORKING FRONT UNDERGROUND MINE LA HAMACA MARN	From July 13th, 2007 to July 12th, 2010.	July 12th, 2010.				
Sanitary Authorization Occupational General Medical Clinic Marlin. MSPAS	From February 20th, 2008 to February 18th, 2013.	February 18th, 2013.	- Comply with the Health Code, articles 7, 121, 123, 157, 28 and 237. (Decree 90-97)			

11.2 Sampling and Measurement Reports

The following sections present specific environmental sampling and measurement information. A map showing the location of monitoring stations for air quality, aquatic biology, surface water quality, and ground water quality is included as Attachment C. Monitoring measurements for surface water quality and ground water quality are contained in Attachment D. Marlin submits the monitoring results each quarter to the MARN with a copy to the MEM.

Air Emissions

The EIA&S evaluated the potential for air quality impacts resulting from operations. Based on conclusions from the air quality prediction study, it was determined that air quality impacts would not be significant. The most apparent potential air quality impacts from mining operations result from fugitive dust emissions from the roads, occurring primarily during the dry season (November – April). Marlin conducts an aggressive dust suppression program (road watering and dust suppression additives) to mitigate potential fugitive dust emissions. The ambient monitoring program calls for the quarterly measurement of particulate levels around the site using PM₁₀ (particulate matter with mean aerodynamic diameter of 10 microns or less) monitoring stations, however, monitoring is often conducted more frequently than quarterly. Additionally, visual inspections are performed daily in the dry season to ensure that management practices are implemented as required to minimize fugitive dust emissions.

Table 30 summarizes the PM_{10} ambient air quality monitoring data for 2008. All monitoring results at both the upwind and downwind stations were below the USEPA ambient air quality standard for PM_{10} of 150 $\mu g/m^3$ maximum for the 24-hour period.

Table 30. Marlin Mine 2008 PM₁₀ Monitoring Data

	PM10 (ug/m ³) - Marlin 2008														
		te di		Month, 2008							Annual				
	Monitoring S	tations	Jan	Feb	Mar 1	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Arithmetic Mean
		EPA Standard		USEPA NAAQS = 150 ug/m³ (24 hour maximum)											
	Downwind	AQ1a (Agel)	ND	ND	ND	ND	97	14	24	56	5	ND	ND	18	36
	Downwind	AQ2 (San José NE)	ND	ND	ND	ND	69	42	44	12	35	ND	ND	17	37
Marlin	Downwind	AQ4 (San José Ixcaniche)	ND	ND	ND	ND	69	14	14	83	16	ND	80	130	58
	Upwind	AQ7 (Carrizal)	ND	ND	ND	ND	139	12	11	83	61	ND	40	12	51
	Upwind	AQ9 (Salem)	ND	ND	ND	ND	ND	14	ND	12	10	ND	17	14	13
1 - 11	Background	AQ10 (Salitre)	ND	ND	ND	ND	ND	12	ND	ND	20	ND	ND	126	53
La Hamaca	Background	AQ11 (Salitre Northwest)	ND	ND	ND	ND	ND	28	ND	ND	13	ND	ND	124	55
Road to Marlin	Not Applicable	AQ12 (Chuena)	ND	ND	ND	ND	ND	14	ND	ND	30	ND	ND	85	43

ND = No Data

Ambient Noise

Ambient noise is monitored in the communities around the mine, at a point along the access road to the mine, and in two background locations where no mining activity is taking place. Ambient noise levels are regularly above the IFC guidelines (WBG in the tables below) in both background monitoring locations and in receptor communities near the mine, with both having similar levels. The 2008 results are included in Tables 31 and 32.

^{1.} Lab methodology errors. Discontinued use of this lab.

	Table 31: 2008 Marlin Mine Ambient Noise Levels – Daytime								
Monitoring Stations					Daytim	e 2008			
	Monitoring Stations			1st Qtr	2nd Qtr	3rd Qtr	4th Qtr		
	Downwind	AQ1a (Agel)	55	45	47	51	56		
	Downwind	AQ2 (San José NE)	55	46	52	58	55		
Marlin	Downwind	wind AQ4 (San José Ixcaniche)		56	53	58	54		
	Upwind	AQ7 (Carrizal)	55	45	51	58	52		
	Upwind	AQ9 (Salem)	55	46	49	59	54		
La Hamaca	Background	AQ10 (Salitre)	55	53	53	56	57		
La Hamaca	Background	AQ11 (Salitre NW)	55	54	54	56	62		
Road to Marlin	Not Applicable	AQ12 (Chuena)	55	54	51	56	51		

Table 32. 2008 Marlin Mine Ambient Noise Levels – Night Time							
Monitoring Stations					Night Tir	ne 2008	
	Monitoring Stations			1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
	Downwind	AQ1a (Agel)	45	44	44	54	56
	Downwind	AQ2 (San José NE)	45	47	49	61	66
Marlin	Downwind	nd AQ4 (San José Ixcaniche)		50	51	56	54
	Upwind	AQ7 (Carrizal)	45	40	43	57	49
	Upwind	AQ9 (Salem)	45	48	46	56	54
La Hamaca	Background	AQ10 (Salitre)	45	49	44	55	56
La Hamaca	Background	AQ11 (Salitre NW)	45	53	46	55	59
Road to Marlin	Not Applicable	AQ12 (Chuena)	45	52	43	54	45

Groundwater

Data from the ground water sampling program is compared to historical data to analyze for any changes in water quality. Data from the wells downgradient of the TSF are also reviewed for any indicator parameters related to the water stored in the TSF. The monitoring wells included in the sampling program and their location descriptions are listed in Table 33.

Table 33. Marlin Mine Groundwater Monitoring Wells & Well Locations					
Groundwater Quality Monitoring Point Location Description					
MW8	Upgradient of the TSF, near Agel. New well installed in 2007.				
MW3B	Downgradient of the TSF.				
MW10	Downgradient of the TSF. New well installed in 2007.				
MW11	Downgradient of TSF. New well installed in 2007.				
MW5/PSA-1	Production Well – South of Marlin Pit, near Río Tzalá				

Groundwater at Marlin is fracture controlled with unpredictable flowpaths. In large-scale terms it can be concluded that groundwater generally flows from south to north, which implies that wells MW10, MW11, and MW3B are downgradient from the waste rock pile and tailings impoundment and wells MW5 and MW8 are upgradient. However, it is likely that there is no direct hydraulic connectivity between any of these wells due to the nature of the fracture controlled system.

MW10 and MW11 were installed in 2007 to provide a more robust groundwater monitoring network downgradient of the tailings impoundment. Unfortunately the wells were vandalized soon after the installation and only one monitoring event could be conducted in 2008 as a result. These wells will be rehabilitated and sampled in 2009. MW10 reported arsenic at approximately 0.3 mg/L. However, this is not thought to be related to any seepage from the TSF because typically arsenic is non-detectable or near the detection limit in the Marlin process water. For these reasons the arsenic levels in MW10 are thought to be background concentration. None of the monitoring wells downgradient of the TSF (MW3B, MW10, and MW11) reported water quality that would be indicative of seepage problems from the TSF to groundwater.

MW5 (also noted as PSA-1) is the production well. It is approximately 300 meters deep and is pumped at an average rate of 10 L/s. Some changes in water quality in this well have occurred over time. This well may be tied to a deep, geothermal source and the changes in chemistry may be due to the fact that pumping over time may be drawing water from this deep geothermal source. The recharge in this well is relatively fast during idle periods. This well is not in the same basin as any of the processing facilities, waste rock pile, or tailings impoundment facilities.

MW8 was installed near the community of Agel and became functional in 2007. This well could ultimately be used as a water source for this community in addition to its use as a monitoring point.

Water quality data from these wells is included in Attachment D.

MW5/Water Consumption

The water from MW5/PSA-1 is used for makeup water in the process plant, water supply for the mine camp and administration buildings, and for underground mining equipment. It is not considered potable water.

Water consumption from this well is monitored continually. The process plant requires significant amounts of water and the majority is recycled from the TSF. During 2008 the process plant used an average of 5 L/s, or 430 m³/day of fresh water sourced from MW5; and an average of 98 L/s, or 8,490 m³/day of reclaim water recycled from the TSF. This equates to 5% of the plant's total

water needs being supplied by fresh water from MW5 while the majority, 95%, of the plant's water needs being met from recycled water from the TSF.

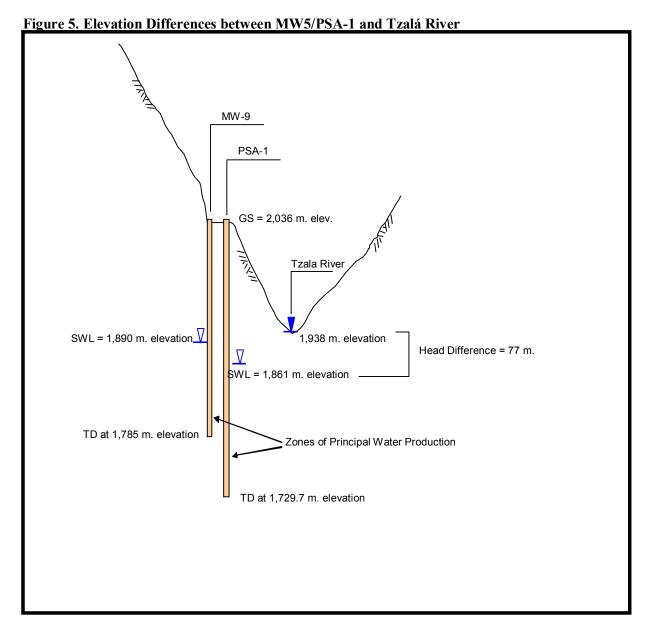
The above paragraph is specific to the water needs of the process plant. It is important to consider the site wide water balance as well. As noted previously, PSA-1 also supplies the underground mine and camp/administration areas. The Marlin Mine continues to work toward improving the water balance efficiency. Since 2006 Marlin has continued to increase the percentage of recycled water to the supply system and decrease the percentage of fresh water to the supply system. A summary of the site-wide water consumption data is included in Table 34 below.

Table 34. Marlin Mine Water Consumption, Recycling and Water Balance Efficiency						
	2006	2007	2008			
Total Water Supply from Well (m³)	324,495	514,832	390,485			
Average Pumped from Well (L/s)	9.9	16	12			
Average Pumped from Well (m³/día)	855	1,410	1,067			
Total Recycled Water from the TSF (m ³)	1,631,910	3,489,820	3,107,331			
Average Pumped from TSF (L/s)	53	111	98			
Average Pumped from TSF (m³/día)	4,610	9,561	8,490			
% of Water Supply from Recycled Water	83%	87%	89%			

Notes:

- 1. Averages are calculated based on days of active pumping.
- 2. Values from the well represent the total amount pumped for the three principle uses: plant, mine, and camp/admin.

The well has a total depth of approximately 300 m, which is approximately 200 m below the bed of the nearby Río Tzalá. The static head difference in water surface elevation between the well and the river was almost 80 m at the time of well construction. The water chemistry in MW5/PSA-1 is different than the water quality in the Río Tzalá, indicating the two sources are not likely to have a direct, hydrogeologic connection, or that they are from different geological units. The diagram below illustrates the elevation differences. Well MW-9 shown in the diagram is the observation well adjacent to MW5/PSA-1.



SWL: Static Water Level, TD: Total Depth

In addition to the monitoring wells noted above, there are five wells along the east embankment of the TSF. These wells, the PW wells, were installed as part of the geotechnical and hydrogeological assessments of the Marlin Mine's TSF, and were completed on the east abutment ridge of the impoundment. The wells were primarily installed to allow *in situ* measurement on the permeability of the materials comprising the abutment. The natural abutment consists of a low permeability pyroclastic/ash unit underlain by a volcanoclastic unit. The wells penetrated between these units and are completed with a well screen in the first 40 m from the bottom. The water depths in the wells were generally at the contact level of the two units and ranged from approximately 60 m in PW12 (the shallowest well) to 90 m in PW5.

Design analysis for the potential seepage through the east abutment during TSF operations suggested that seepage rates would be low; however, it identified an increase in the phreatic

surface in the abutment, which could potentially result in seepage in the drainage to the east. In order to monitor for and mitigate this potential impact if necessary, the installation of seepage recovery/dewatering pumps in the wells was proposed. In case of significant increases in water levels, and/or water quality evidence indicative of negative impacts to ground water, pumping could be performed as indicated and additional wells could be installed.

Water level monitoring has been conducted since the TSF was commissioned in early October 2005. The historical water level information in the PW wells is shown in Attachment D. One well, PW7 has shown a slowly increasing water surface elevation, however, the water quality data from this well does not indicate seepage from the TSF. The reason for the water level increase is uncertain; however, exploration wells were drilled nearby and may have created a change in the hydrogeologic inflow at well PW7. Water quality in this well will continue to be monitored regularly. The other four wells have maintained consistent water surface elevation. The water depth and quality data for PW7 is included in Attachment D.

Surface Water Monitoring

Marlin Mine personnel conduct surface water monitoring at upstream and downstream points where the potential for mining impacts can be monitored. Surface water sampling locations are listed in Table 35.

Table 35. M	Table 35. Marline Mine Surface Water Sampling Locations					
Surface Water Monitoring	Location Description					
Point						
SW1	Upstream Monitoring – Río Tzalá					
SW1-2	Between SW1 and SW2					
SW2	Downstream Monitoring – Río Tzalá					
SW3	Riachuelo Quivichil – downstream of the TSF					
SW4	Upstream – Río Cuilco (upstream of Quivichil confluence)					
SW5	Downstream – Río Cuilco (downstream of Quivichil confluence)					
SW8	Quebrada Seca - Downstream of TSF, upstream of SW3					
SW11	Upstream – Río Cuilco (upstream of Tzalá confluence)					
SW12	Downstream – Río Cuilco (downstream of Tzalá confluence)					

All points have perennial flow with the exception of SW8, which is within the upper, intermittent reaches of the drainage below the TSF. Point SW8 is upstream of SW3.

Marlin is located in two sub-watersheds, the Riachuelo Quivichil and the Río Tzalá. Both sub-watersheds drain to the Río Cuilco, which ultimately runs into Mexico and eventually discharges into the Gulf of Mexico. The Mexican border is approximately 80 km downriver from where the Riachuelo Quivichil enters the Río Cuilco.

The components of Marlin that are within the Río Tzalá sub-watershed include a portion of the Marlin pit, some access roads, and the production well MW5/PSA-1. There are no cyanide related facilities, waste rock dumps, or tailings facilities within the Río Tzalá sub-watershed. The surface water monitoring points within this sub-watershed include SW1, SW1-2, and SW2 from upstream to downstream respectively in the Río Tzalá. There were no significant differences in the water quality of the Río Tzalá upstream versus downstream of mining installations in 2008. The most important mitigation measures that are undertaken in this sub-watershed are the

sediment control structures constructed to ensure that stormwater runoff from mining installations does not cause negative impacts to the Río Tzalá during the rainy season (May – October).

The components of Marlin that are within the Riachuelo Quivichil sub-watershed include a portion of the Marlin pit, the Cochis pit, access and haul roads, the landing strip, borrow areas, stockpiles, the process plant, waste rock dumps, and the TSF. The surface water monitoring points within this sub-watershed include SW8 and SW3 downstream from the TSF and prior to the confluence of Riachuelo Quivichil with the Rio Cuilco, and SW4 and SW5 in the Rio Cuilco upstream and downstream of this confluence. No discharge from the TSF to the environment has occurred to date, but this eventual discharge will ultimately report to points SW8, SW3, and SW5 in that order. SW4 represents water quality in the Río Cuilco upstream of any future discharge events. Upstream and near to point SW4 is a non-mining related aggregate quarry where material is being mined from within the causeway of the Río Cuilco for a government sponsored road paving and maintenance program in the area. A certain amount of sediment contribution is likely occurring in the Río Cuilco as a result of this activity.

Points SW11 and SW12 were established more recently where point SW11 is also in the Río Cuilco but is upstream of its confluence with the Río Tzalá and point SW12 is downstream of its confluence with Río Tzalá but upstream of the confluence with the Riachuelo Quivichil.

There were no significant differences in the water quality of the points in the Riachuelo Quivichil/Rio Cuilco upstream versus downstream of mining installations in 2008.

The location of all of these surface water monitoring points are shown on the map in Attachment C. The data for all surface water points is shown in Attachment D.

<u>Liquid Effluent Discharges</u>

The Marlin Mine did not have any end-of-pipe discharges during 2008. The first end-of-pipe discharge from the TSF may occur in the 2009 rainy season but is dependent on climatic conditions. During any future discharge events, water quality will be monitored and flow measured regularly. Discharged water quality is required to comply with the IFC effluent guidelines and with the MARN standards (Reglamento de Descarga y Reuso de Aguas Residuales y la Disposición de Lodos Acuerdo 236-2006").

Water Treatment Plant

Monitoring in the TSF water indicated that to guarantee compliance with both the IFC effluent guidelines and the MARN regulation, water treatment prior to discharge may be required for mercury and cyanide.

The INCO plant is very effective in treating tailings for WAD cyanide significantly below 50 ppm as required by the IFC guideline for open waters. Additionally, the WAD cyanide levels in the TSF are typically below all effluent standards, but the total cyanide levels range from 1 ppm to 5 ppm, where the effluent standard is 1 ppm. To further reduce the total cyanide levels as required for discharge, a secondary water treatment plant was constructed. The plant includes an oxidation step followed by a clarification/filtration step. Finally the secondary water treatment plant includes a carbon adsorption process, however according to the test work conducted this will be only used as a contingency or polishing step when necessary. The secondary water treatment plant is operational; however, no discharge to the environment has occurred to date. During the start-up phase, various testwork of the discharge was conducted as it was treated and

recycled back into the TSF. The testwork confirms that the required discharge water quality can be achieved.

Operational Monitoring

No seepage from the Area 5 waste dump, monitoring point D9, was noted during the regular, quarterly inspections. Seepage from the main waste dump, monitoring point D8, was noted in November and a sample was taken. This seepage water reports to the TSF, as the toe of the main waste dump is just upstream of the TSF. The water quality from this seepage water was very good and complied with both IFC guidelines and MARN standards for effluents, although the water is not currently discharged to the environment. WAD and Free Cyanide were both non-detectable and Total Cyanide was 0.0138 mg/L. Nitrogen as NO₂ + NO₃ was reported at 5.66 mg/L which could possibly be interpreted as interference while analyzing Total Cyanide. Future analysis of Total Cyanide will include addition of sulfamic acid to the sample to ensure no nitrate/nitrite interference during analysis. Arsenic and mercury were non-detectable in both the dissolved and total forms. The water quality data for point D9 is included in Attachment D.

Aquatic Life Monitoring

In addition to water quality monitoring, Montana is required to conduct aquatic biology monitoring twice per year, corresponding to the dry and rainy seasons. This monitoring occurs in the Río Tzalá at points SW1 and SW2, the Riachuelo Quivichil at point SW3, and in the Río Cuilco at points SW4 and SW5. An additional point for aquatic monitoring has been added in the Río Cuilco upstream of the confluence with the Río Tzalá (SW10) to monitor background, nonmine related changes. All aquatic monitoring was conducted as required in 2008.

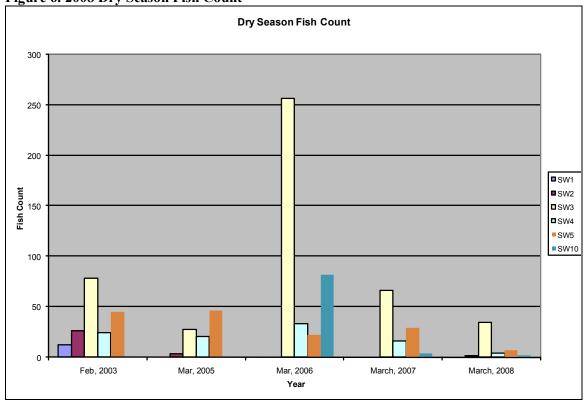
As of the end of 2008, six rainy season sampling events had occurred, beginning with the baseline monitoring in third quarter of 2002. Additionally five dry season sampling events had occurred, beginning with the baseline monitoring in the first quarter of 2003. The work has been conducted by qualified biologists from *Consultoria y Tecnologia Ambiental*, S.A. (CTA) since the baseline data collection. CTA prepares a detailed report with each monitoring event and this report is submitted to the MARN as part of the quarterly reporting system. The report includes detailed information on fish, macroinvertebrate and habitat monitoring.

A partial summary of the results of the fish sampling conducted to date are shown in Tables 36 and 37 and Figures 12 and 13. Based on the number of individuals noted at each site, reviewing this data historically as well as conducting comparisons between upstream and downstream monitoring points, and reviewing the background point changes; no significant mine related impacts appear to have occurred to date.

Table 36. 2008 Marlin Mine Aquatic Biology: Dry Season									
	Number of Individuals								
Station	Feb, 2003	Mar, 2005	Mar, 2006	March, 2007		March, 200	08		
				Net	Electric	Net	Electric		
SW1	12	NS	0	0	0	0	0		
SW2	26	3	0	0	0	0	1		
SW3	78	27	256	0	66	0	34		
SW4	24	20	33	38	16	6	4		
SW5	45	46	22	10	29	119	7		
SW10	NS	NS	82	0	4	19	2		

	Table 37. 2008 Marlin Mine Aquatic Biology: Rainy Season								
	Number of Individuals								
Station	Jul, 2002	Sep, 2004	Sep, 2005	Sep,	2006	Sep, 2	2007	Sep, 2	2008
				Net	Electric	Net	Electric	Net	Electric
SW1	0	0	0	0	0	0	0	0	0
SW2	0	0	1	0	0	0	0	0	0
SW3	62	14	7	9	11	0	1	0	10
SW4	21	30	261	1	27	1	15	0	6
SW5	14	47	32	5	9	5	21	0	12
SW10	NS	NS	NS	15	17	0	13	0	17





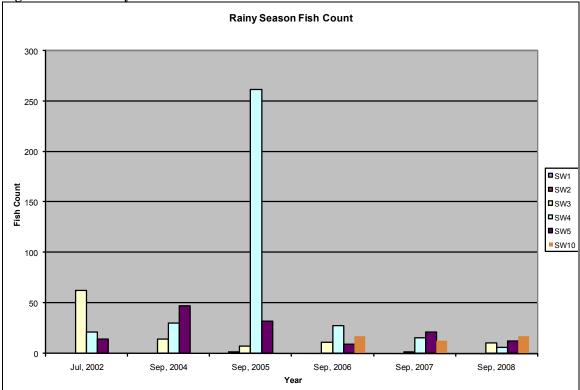


Figure 7. 2008 Rainy Season Fish Count

11.3 Waste Management

Marlin currently uses the main waste dump as a landfill facility for non-hazardous and solid waste, which mainly includes office and construction waste. Cells within the waste dump are opened, filled, and closed as the waste dump shifts and expands.

Organic wastes are disposed in a trial compost cell to be later used as fertilizer in revegetation or reforestation areas. The petroleum contaminated soil (PCS) is transported to the bioremediation cell where it undergoes aeration, watering and fertilizing until the total petroleum hydrocarbon (TPH) level is below 1000 ppm.

Chemical contaminated wastes such as empty cyanide bags and boxes are incinerated daily. The ash from the incinerator was analyzed and classified as a non-hazardous waste; therefore, the ash is disposed of within the waste dump.

Another special waste generated by Marlin is lead-contaminated wastes from the fire assay process. This waste is comprised of spent cupels, crucibles, and slag. These wastes are reintroduced into the process circuit at the SAG mill.

Two significant waste streams are recycled at Marlin; used oil and scrap metal. The used oil is collected by an approved company who then typically sells it to *Cementos Progreso* for their cement kiln. The scrap metal is collected and typically sold to a metal foundry for re-melt. Vehicle batteries in the case of the Caterpillar equipment are sent back to the vendor for recycling.

11.4 Dam Safety

Tailings from the process are treated by the INCO plant for cyanide destruction prior to deposition in the TSF, which is formed by a cross valley dam consisting of a rockfill shell and a low permeability core. The TSF is being raised progressively during the early years of the mine life to an ultimate elevation of 1962m using mine waste rock placed in downstream staged raises. The facility became operational in October of 2005.

For long-term performance of the TSF dam (after TSF dam construction is completed), the peak acceleration from the maximum credible earthquake (MCE) was used for design. The MCE was based on a return period of 10,000 years (or an annual probability of exceedance of 1 in 10,000). The calculated peak ground acceleration at the mine from the MCE is 0.51 g. This would be equivalent to ground acceleration at the mine from a Magnitude 8 to 8.5 event along the Polochic Fault Zone.

For operational performance of the TSF dam (the TSF dam in its current configuration under construction), the peak acceleration from the operation based earthquake (OBE) was used for design. The OBE was based on a return period of 475 years (or an annual probability of exceedance of 1 in 475). The calculated peak ground acceleration at the mine from the OBE is 0.32 g. This would be equivalent to ground acceleration at the mine from a Magnitude 7 to 7.5 event along the Polochic Fault Zone, or from a much larger event beneath the off-shore subduction zone.

Montgomery Watson Harza and Montana personnel follow the seismic response procedures set up in the TSF monitoring plan. If a seismic event is felt at the mine, an inspection of the TSF dam is made as soon as practicable, and the on-site seismograph (accelerometer) is checked to see if ground acceleration readings have been recorded. If the on-site seismograph indicates recorded readings, depending on the value, the displacement sensors within the TSF are reviewed to ensure that movement is within the design criteria. To date all sensors have indicated the dam is performing as expected.

Montana retained Robertson Geoconsultants, Inc. as an independent expert to perform a review of the TSF for the Marlin Mine in compliance with the principles established in the IFC/World Bank guidance and operating principles OP 4.01 Annex D and OP 4.37. A Tailings Dam Review Board was required to review the development of the dam design, construction and initial dam filling. In this case, Dr. Andy Robertson of Robertson Geoconsultants, Inc., constituted the Review Board under the terms of this OP. Although this Board was comprised of one individual, this Board was authorized by Montana Exploradora de Guatemala, S. A. to consult with independent technical specialists as needed.

Although Montana has no formal arrangement with the IFC/World Bank at this time, Dr. Robertson continues to be contracted by Montana to conduct an annual review regarding dam safety following the same standards. Dr. Robertson was on site in 2008 for the annual review of the facility. The report is included as Attachment E.

11.5 Waste Rock Handling

The Marlin open pit mine initiated waste stripping in July of 2005, with ore production following in August. Previous tests have shown some rock types to be potentially acid generating in both the open pit and the underground mine. This section is a summary of the waste rock management procedures and handling.

Rock Analysis Procedures

Throughout 2008, all blastholes in the open pit waste zones were sampled and analyzed for total sulfur and total carbon content by the site SGS lab using their LECO furnace. These values are then used to calculate the acid generating potential (AGP) and acid neutralizing potential (ANP) of the rock type sampled. The ratio of ANP:AGP is then used to characterize the waste as follows:

- 1. Non Acid Generating (NAG): Rock with ANP/AGP > 2 and/or S< 0.1%,
- 2. Potentially Acid Generating (PAG): Rock with 1 < ANP/AGP < 2 and S>0.1%
- 3. Acid Generating (AG): Rock with ANP/AGP < 1 and S> 0.1%.

Once each blasthole has been categorized accordingly, blocks of NAG and AG waste are mapped out, flagged in the mine, and managed accordingly by the mine operations department. The PAG and AG wastes are treated equally, and hauled to specific areas within the waste dump for encapsulation. To be conservative all waste rock from the underground mine is assumed to be PAG waste and handled as such.

2008 Waste Rock Data

The Marlin open pit mine produced approximately 5,413,004 tons of waste rock and the underground mine produced approximately 287,602 tons of waste rock during 2008. Approximately 15% of the total waste rock produced in 2008 was classified as PAG and encapsulated within the main waste dump, with the exception being waste rock from the underground in which case 93% went back into the underground as backfill with the remainder being encapsulated within the main waste dump. Details of waste rock placement are included in Table 38. The "Mini Dam" was a small, protective barrier placed in the tailings impoundment to keep fine tailings material from entering into the reclaim pumps.

Table 38. 2008 Marlin Mine Waste Rock Production						
Open Pit Waste Rock Management	Tons 2007	Tons 2008				
To Waste Dump	2,320,126	4,012,828				
Clay to Dam Construction	385,702	91,432				
Rock to Dam Construction	582,088	493,005				
Rock to Aggregate Crusher	118,735	27,551				
Clay to Area 5 Cap/Closure	47,953					
Organic to Area 5 Cap/Closure	9,831					
PAG to Waste Dump	71,537	561,578				
Mineral HP - Stockpile Future Heap		39,737				
Rock to Shop / Mini Dam		186,874				
Total	3,535,972	5,413,004				
Underground Waste Rock Management	Tons 2007	Tons 2008				
PAG to Waste Dump	72,800	20,000				
Backfill	128,000	267,602				
PAG to Area 5 Dump	12,500					
Total	213,300	287,602				

Long Term Field Geochemical Testing

Geochemical test work was conducted on the exploration core samples prior to design of the mine to determine appropriate waste rock management practices to avoid future acid rock drainage production from the mine.

In addition to this early phase of test work, and the rock analysis procedures mentioned above; long term field column testing (drum tests) is underway to review the more long term potential for production of acid rock drainage. Originally in September, 2006 four drums of different rock types were placed in the field, although one drum was vandalized and lost early on. Seven drums of additional rock types were added to the program in May, 2008 and finally two more in August of 2008 for a total of 12 drums with various rock types are undergoing this testing. Static Acid Base Accounting (ABA) was conducted on each rock type represented by the various different drums.

During the rainy season, weekly samples are taken of meteoric water that passes through the rock samples and results in a leachate, for field parameters (pH, conductivity, redox potential, etc.). Also during the rainy season a monthly sample is taken for a full suite of analytes.

One drum of the twelve contains a rock type classified as PAG during the static ABA analysis. The leachate from this drum is behaving as expected with an increase in field conductivity, a low but relatively constant pH, and the following metals in the leachate analysis: As, Cd, Cu, Fe, Ni, & Zn above effluent standards/guidelines.

The other eleven drums were mostly classified in the zone of uncertainty with a few classified as NAG. These are also performing as expected with very little metals leachability, where only one drum indicated Fe on one occasion that was above the effluent standards/guidelines. pH appears relatively constant with 25% of the values below the effluent standard/guideline (6 <pH<9 standard units) and conductivity in some cases is decreasing over time.

This test work must be conducted for a longer period of time to allow for any specific conclusions or recommendations to be produced. However, the data currently is in accordance with the original prediction of the majority of waste rock being acid neutralizing at Marlin and the minority being acid generating. As noted in the "Rock Analysis Procedure" section above, static testing is conducted on all pit blast holes in order to manage waste rock encapsulation procedures and all waste rock from the underground is encapsulated within the waste dump if it is not used as backfill in the underground. This longer term field testwork will be incorporated into any future closure planning.

The data is shown in Worksheet Geochem in Attachment F.

12.0 HEALTH AND SAFETY MONITORING

Montana strives to provide a healthy and safe work environment, free of accidents and occupational health risks, focused on the control and prevention of all loss of human resources, company property and the environment. It is the philosophy and belief of the company that accidental loss can be controlled through the implementation and administration of an effective loss-control program, which requires the active participation of all the employees. To this end, all employees are provided health, safety and loss prevention instruction and training to help them carry out their duties and responsibilities according to the rules, policies and practices established

by the company. Montana has established an internal committee comprised of both management and hourly workers who perform monthly inspections focused on the environment, health and safety in the workplaces.

During 2008, Goldcorp developed a new Health and Safety Policy (see Attachment G) and the Marlin Mine reorganized the Health and Safety Department, hired a new Manager for the department and placed training functions within the department. Also the Marlin Mine revised its Health and Safety program with an emphasis on improving the safety culture within the worksite; to begin to effect change, Safety Leadership Training (SLT) was delivered to all directors and managers at the mine. Additionally, work sessions with all managers and supervisors were held to brainstorm methods and opportunities for improving the culture within the mine. Other improvements included the development of formal emergency response plans and the training of emergency responders for both the surface and underground operations. Installation of internal and external traffic and directional signage to improve circulation and road safety was also completed.

12.1 Occupational Health and Safety

During 2008, the Marlin Mine had a total of 169 lost-work days resulting from 10 lost-time accidents (see Tables 39 and 40). The 2008 lost time incident frequency improved over 2007 frequency.

Table 39. 2008 Marlin Mine Health And Safety Incident Statistics							
Occupational Health and Safety Incidents	Number of Incidents	Defails					
Fatalities	0						
Total Lost Time Accidents	10	See Table 36 for a description of lost time accidents					
Total number of lost work hours resulting from incidents	1,352						
Total man hours worked	3,876,385	2008 LTI frequency 0.52					

	Ta	ble 40. Details Of Marlin Mine 2008 l	Lost Time Accidents
Accident No.	Date & Time	Accident Description and Causes	Corrective or Preventative Measures
1	01/10,	An underground helper was hit on the head and shoulders by the end of a pipe causing 2 lacerations to his head and bruising and lacerations to his shoulders.	A new procedure for hanging pipe was instituted, which calls for higher-grade chain and means of suspension.
2	01/20,	An underground Jumbo Operator fell from the bucket approximately 3.5 meters to the ground.	A new standard was established that requires loader buckets to be equipped with a hook on the backside of the bucket and for anyone working in a bucket to

Table 40. Details Of Marlin Mine 2008 Lost Time Accidents						
Accident No.	Date & Time	Accident Description and Causes	Corrective or Preventative Measures			
			utilize the hook with a lanyard.			
3	05/13	A temporary worker from Civil Works slipped and fell and hit his right elbow on a rock. Results of the x-rays confirmed a fracture of the elbow resulting in lost-time.	Provided safety awareness talks with all groups, stressing procedures to avoid slips and falls.			
4	09/10	A temporary employee working on Swiss Boring operation was hit by a cyclone that toppled from a tripod. He hit his head when he fell to the ground and the resulting laceration required 10 sutures.	Reviewed equipment maintenance and integrity procedures with the contractor. Also improved unsafe conditions at work site.			
5	10/26	A camp helper was accosted and beaten by a person attempting to steal a pump. The worker needed sutures for lacerations and received 8 days medical suspension.	Increased the security employees in the camp area.			
6	10/09	A contractor employee (Hergo) was tightening a large bolt on a CAT road grader with a pipe wrench. The wrench slipped, forcing the mechanic's index finger of his right hand into the edge of the blade, which amputated the end of the finger at the first knuckle.	The contractor was required to improve safety procedures and reminded that all work should be performed by competent personnel.			
7	11/04	A long-hole stope helper was hit by a portion of the cemented backfill that fell. He was given initial first aid in the underground and brought to the surface and then to the clinic.	Inspected all backfilled areas, provided better fortification support, and reviewed scaling procedures with employees.			
8	11/12	A civil work employee sprained his right ankle while walking to his work area on the mine site. He continued working all day without reporting the incident, but later in the afternoon the pain increased and his ankle began to swell. He was taken to the clinic, where he received three days of medical suspension.	Instructed workers to enter the work site from the main gate, use appropriate walkways and immediately report all accidents.			
9	12/14	An underground employee burned his right forearm while opening a vehicle radiator cap. The employee did not report the injury until the following day.	Employees were instructed that vehicles should only be checked by the on-site maintenance crew and to immediately report all accidents.			

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Table 40. Details Of Marlin Mine 2008 Lost Time Accidents					
Accident No.	Date & Time	Accident Description and Causes	Corrective or Preventative Measures		
10	12/30	A worker on the services crew fell off an I 28 CAT loader while dismounting and his lamp cord caught on the door handle. He received a laceration to his head that required sutures and had swelling to the knee.			

12.2 Training

Table 41 below details the Marlin Mine introductory and refresher Industrial Health and Safety training courses provided during 2008. All Montana and contractor employees receive industrial health and safety training shortly after they are employed and also receive 48 hours of specialized and refresher training on an annual basis.

Table 41. 2008 Marlin Mine Health And Safety Training						
Course	Number of Employees Trained					
Introduction to Industrial Health and Safety	All employees					
Annual Health and Safety Training	All company and contractor employees throughout the year					

The following outlines the content of the introductory and annual refresher courses.

Introduction to Industrial Health and Safety:

Each surface employee receives a three-day introductory course and each underground miner receives a five-day introductory course on industrial health and safety rights and responsibilities including:

- Company health and safety policies, standards and procedures
- Industrial health and safety overview
- Rules of safety and general conduct
- Risk prevention
- Environmental preservation
- Emergency transportation and communication procedures
- Safety procedures and care of the work environment
- Emergency evacuation and escape plans
- Personal protection equipment
- Introduction to First Aid
- Land control issues
- Industrial health, safety and hygiene

- Electrical safety
- Safe use and management of explosives
- Safe use and management of chemical products
- Fire extinguisher use

Annual Refresher Training:

Each employee is required to attend an annual safety refresher training course. Topics include the following:

- Contingency committee organization and training
- Emergency action plan
- Operating contingency manual
- Evacuation
- Earthquakes
- Fire prevention and suppression
- Fire suppression teams
- First aid
- Use and management of emergency equipment
- Use and management of chemical products

12.3 Employee Workplace Monitoring

Marlin Mine staff conducted workplace monitoring in compliance with Guatemalan Department of Energy and Mines (MEM) requirements specified in the report SCDM-INF-EXT No. 236-2004f.

For the assessment, field sampling results are compared against United State Mine Safety and Health Administration (MSHA) standards for air quality in underground mines and against United States Occupational Safety and Health (OSHA) standards for surface locations. The fieldwork consisted of in situ sampling, which occurred quarterly during 2008.

Underground Mine Noise Exposure Levels

During 2008, audio measurements were conducted inside the underground mine tunnel at 14 stations and levels. MSHA and OSHA dosimeter parameters used for the sampling are shown below.

TLV – TWA¹¹ parameters without hearing protection:

• 8 Hours Up to 90 decibels

The results obtained from the audio dosimetry sampling shows that sound levels in the underground mine tunnels are above MSHA and OSHA standards for unprotected exposure. Consequently, auditory protection devices must be worn inside the underground mine at all times.

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¹¹ TLV-TWA (Threshold Limit Value-Time Weighted Average): The time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, to which nearly all workers may be exposed, day after day, without adverse effect.

Underground Mine Air Quality

Measurement of oxygen $(O_2)^{12}$, carbon monoxide (CO) and carbon dioxide (CO₂) was performed quarterly during 2008 in the underground mine tunnel and refinery. A total of 14 air quality stations are monitored in Marlin underground areas.

According to the Marlin Mine monitoring results, oxygen levels in the Marlin underground were above the MSHA standard contained in 30 CFR 57.5015 at every sampling station, and levels of nitrogen, hydrogen sulfide, carbon monoxide and methane were all well below allowable thresholds, which indicates that the ventilation system is adequately sized and functioning properly.

A prior area of concern regarding air quality in the underground mine was the level of diesel particulate matter (DPM). Diesel fuel sold in Guatemala contains high levels of sulfur, however Montana has been allowed by the Guatemalan government to import low-sulfur diesel fuel for use in the underground mine, substantially reducing the level of DPM.

Silica Dust Monitoring

Silica dust monitoring was performed quarterly at nine stations within the Marlin Mine operations. Monitoring results showed exposure levels below permissible standards at all locations.

12.4 Fire Safety Monitoring

Table 42 presents Marlin Mine fire safety monitoring data for 2008.

Table 42. Marlin Mine 2008 Fire Safety Activities				
Fire Safety Verification Activities	Number Performed			
Fire Drills*	See discussion below			
Inspection and certification of electrical and mechanical fire detection and suppression systems.	1			
Portable Fire Extinguisher Inspections	All fire extinguishers are inspected monthly			
Portable Fire Extinguisher Recharging	All fire extinguishers requiring recharge are serviced bi-monthly			

Fire Drills, Emergency Exercises and Training

During 2008, the Marlin Mine OH&S Department maintained an Emergency Response Contingency Brigade that included 75 certified industrial fire fighters and brigade members in training. The brigade has received specialized training for a variety of emergency rescue situations and emergency rescue techniques. Each brigade member participates in periodic training sessions. The Contingency Brigade also conducts and participates in four mock disaster exercises each year. The 2008 emergency training program included:

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¹² % O₂ refers to the percentage in volume of oxygen in the air within the tunnel.

- Execution of the evacuation plan and first aid applications;
- Contingencies and response to hazardous materials spills;
- Search and rescue in collapsed structures and elevated locations;
- Knowledge and use of fire suppression equipment;
- Underground Mine Rescue training scenarios.

Other 2008 Emergency Response milestones include:

- Integration of the San Miguel Ixtahuacàn municipal fire brigade into the Marlin Mine training program.
- Development of fire brigades from a number of mine departments that are available on a 24 hour, seven day/week, 365 day per year basis.
- Creation of a central communication center for all emergencies.