

***MARLIN MINING PROJECT 2005 AMR***

**ATTACHMENT C**

**2005 ENVIRONMENTAL AUDIT AND REVIEW  
MARLIN MINING PROJECT  
GUATEMALA**

**MARCH 2006**

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## 1.0 INTRODUCTION

Montana Exploradora de Guatemala, S.A. (Montana), a wholly owned subsidiary of Glamis Gold, Ltd., owns and operates the Marlin Mining project, which is now a mine in commercial production. The Marlin Mine is a gold and silver mine and processing facility located in the municipalities of San Miguel and Sipacapa, in the Department of San Marcos, Guatemala. The mining concession is 20 km<sup>2</sup>. Commercial production began in late October 2005.

Mining occurs simultaneously using both underground and open pit methods. Ore is hauled approximately 2 km from the mine to the crushing and grinding facility. The ground ore is processed in tanks by an agitated leach in a weak cyanide solution. The resulting product is passed through a counter current decant (CCD) system. Gold and silver are recovered from solution by a zinc precipitation/Merryl-Crowe system. The tailings from the CCD are treated to detoxify the residual cyanide prior to disposal in the Tailings Storage Facility (TSF). Waste rock is currently being disposed of in a smaller waste rock facility to the north of the mine (Area 5) until the development of the base of the main waste rock facility is completed in early 2006.

The International Finance Corporation (IFC) has provided a portion of the finance for the Marlin project. The World Bank/IFC requires an environmental audit to be performed once per year by a qualified independent third party. This audit report has been prepared by MFG, Inc. of Fort Collins, CO, USA. MFG has not performed any consulting services to Montana and is a qualified third party.

The previous IFC Audit was completed in January 2005, during the construction phase of the project. The site inspection for the current audit occurred on November 7-9, 2005, concurrent with the Glamis Gold Ltd. internal corporate environmental audit. During the site inspection, audit staff toured the facilities including the contractor yards, tailing storage facility, weather station, waste rock dump, underground workings, surface extraction area, crushing and grinding facility, mill and process facility, refinery, vehicle maintenance facilities and parts storage, fuel and oil storage, truck wash, landfill, greenhouse, reforestation areas, surface and ground water sample points, and surface water runoff control structures. Various Montana staff working at the different areas were interviewed to determine the regular and common environmental practices at each component of the site. Additionally, staff reviewed available monitoring documentation, management plans that make up the Environmental Management System, available and pertinent records, and other related documents. The scope of this audit was to review Montana compliance with all environmental regulations, management plans, and the Estudio de Evaluacion de Impacto Ambiental y Social (EIA&S) at the Marlin Mine. The first and second quarter monitoring reports for 2005 (required by Ministerio de Ambiente y Recursos Naturales – MARN) were

the only quarterly monitoring reports available for 2005 at the time of the site visit. A follow up visit occurred March 20-22, 2006, to review progress on action items identified during the site visit, and the data collected and reported in the third and fourth quarters of 2005 (Montana 2005a, 2005c, 2005d, 2006). This audit does not include health and safety compliance or cyanide code compliance.

## **2.0 REVIEW OF 2004 AUDIT**

The 2004 Environmental Audit listed a number of items to be addressed. These included:

- Establishment of an organization and structure that will meet the objectives of the monitoring and compliance aspects of the project
- Development and finalization of environmental management plans
- Improvement in housekeeping and general environmental management and controls
- Mitigation of dust emissions
- Mitigation and remediation of sediment releases

The first item was addressed with the hire of a senior environmental manager and the establishment of a Senior Level Environmental Committee in February of 2005.

The development and finalization of the management plans listed in the 2004 Audit has occurred. These plans are all dynamic documents and updates and improvements to the plans will occur on a regular basis. The Environmental Monitoring Plan was in draft form for this Audit, but at the follow up visit, the final plan was complete. However, certain suggestions will be made in a later section of this report to improve this Plan and to re-issue a revised, final version.

General “housekeeping” and management of hydrocarbon materials, contractor yards, and maintenance of monitoring data records were listed as an issue in the 2004 report, and at the finalization of that report significant progress had already been made on improving those issues and concerns. At the time of the 2005 audit site inspection, some of these items were still of concern, specifically the status of the contractor maintenance and storage areas. Significant improvement in these areas was observed in the follow up visit in March 2006. These are described in detail in the waste management section of this report.

The 2004 audit listed dust emissions as one of the most apparent environmental issues at the site. At the time of the 2005 Audit site inspection, no issues with dust control were observed. Additional observations were made in March 2006 that indicate that dust control was being continually addressed. Dust control is addressed in the air quality section of this report.

The second most apparent, but listed as most significant, environmental issue at the site was sediment migration, specifically in the area below the TSF. The 2004 Audit recommended best management practices in that area prior to the 2005 rainy season. This issue is still of concern, as the mitigation measures put in place in the rainy season 2005 were not totally effective. Montana reports that re-grading and revegetation will occur prior to the rainy season of 2006, and that should improve sedimentation issues. This is discussed in more detail in the sediment management section of this report.

### **3.0 ENVIRONMENTAL MONITORING**

The Environmental Monitoring Plan was not completed for the November 2005 site visit, but was available for review during the March, 2006 follow up visit (Montana 2006b). At the time of the follow up visit, the Environmental Management at the mine had completed the plan and issued the document internally, which included significant improvements and changes which should clear up any discrepancies for monitoring in 2006. Upon review of the document during the March, 2006 follow up visit, suggestions were made to improve and re-issue the document.

### **4.0 WASTE ROCK MANAGEMENT**

The Waste Rock Management Plan was completed in July 2005. This plan outlines specific details for the waste rock disposal facility (WRF) design and waste characterization. Waste characterization is required on a continual basis for correct placement of waste rock in the WRF. Every borehole drilled produces drill chips which are analyzed for metallurgical content as well as characterization of waste. These data are maintained within a database, and direct the placement of waste material of different acid generating characteristics into the WRF. Operations at the mine appear in full compliance with the requirements of the Waste Rock Management Plan.

### **5.0 TAILINGS MANAGEMENT**

The Tailing Storage Facility Monitoring Plan requires extensive monitoring of water and tailings flows/slurry amount to the TSF, as well as flows of the rivers and streams below the TSF, climatic data, and embankment survey monuments for movement. These data are needed to maintain the long term integrity of the TSF, anticipate any potential problems, and quantify the amount and the quality of material stored in the TSF. The TSF Monitoring Plan also requires water quality analysis at both the TSF monitoring wells (G11, PW-3, PW-5, PW-7, and PW-12) and stream gauging stations on a monthly basis for primary metals and salts, and a quarterly basis for a full analysis (Table 1 of TSF Monitoring Plan, also summarized in Table 1 of this document). Montana personnel have indicated that water quality monitoring is only necessary when water level changes are observed in the PW wells. Montana does

sample the G11 well quarterly, but not monthly. At the time of the initial site inspection, Montana recognized that the procedures followed differed from the TSF Monitoring plan, and that an updated plan should be submitted to the IFC that justifies the current procedures. By March 2006, during the follow up visit, the environmental monitoring plan was finalized and it will supersede the requirements of the original TSF monitoring plan for 2006 once it is submitted to the IFC, MARN, and MEM. Some additional changes to the new Environmental Monitoring Plan were recommended during the audit prior to its submittal to the external agencies.

The TSF Monitoring Plan requires the monitoring data to be reported quarterly to MARN and the Ministry of Environment and Mines (MEM), and annually to MARN, MEM, IFC, Marlin Engineering and Consulting (MEC – the design engineers), and Glamis Gold, Ltd. This did not occur in 2005 because the TSF was still in the construction phase for most of the year. Montana indicates that the reporting requirements will be met in 2006, or an update to the requirements will be submitted in the Revised Environmental Management Plan.

Discharge of tailings to the TSF had just begun at the time of the initial site visit for this audit. There have been no discharges from the TSF to the outside environment; therefore there has been no monitoring of those data. The operations at the mine are not compliant with the original TSF Monitoring Plan, but should be compliant with the updated Environmental Monitoring Plan for 2006. The issues are related to monitoring frequency and reporting requirements and will be further clarified in the revision to the Environmental Monitoring Plan recommended during the March, 2006 follow up visit.

## **6.0 AIR AND NOISE MANAGEMENT**

### **6.1 Air**

The Dust Control Management Plan was completed in April 2005. Road watering to control dust occurs everyday during the dry season and as needed during the wet season. During the initial site visit the Audit team encountered water trucks spraying the road surfaces on multiple occasions at the site and on the main service road external to the site. At the time of the follow up visit, an asphalt emulsion product was also being applied to some of the roads around the offices, camp, and mill area, which appeared to be a very successful dust control measure, and Montana has indicated that this product will be tested for durability on haul roads and other roads at the site for additional dust control. Montana appears to be initiating all possible Best Management Practices for control of dust.

The EIA&S requires Montana to conduct ambient air quality monitoring at 7 locations on a quarterly basis (AQ1, AQ2, AQ4, AQ5, AQ6, AQ7, AQ8). The Draft Environmental Monitoring plan, when

finalized, will modify this requirement to 8 stations (AQ1, AQ2, AQ4, AQ9, AQ10, AQ11, AQ12, and AQ15) with AQ1, AQ4 and, AQ15 monitored monthly, the rest quarterly. The Dust Management Plan differs by requiring *monthly* measures of air quality (PM<sub>10</sub>), but does not mention the number of stations where this will occur. This should also be clarified in a revision to the Environmental Monitoring Plan.

The air sampling locations monitored in the first and second quarter 2005 differ slightly from those in the EIA&S. The first quarter report indicates that AQ2, AQ4, AQ5, AQ6, AQ9, AQ10, and AQ12 were monitored for PM<sub>10</sub>. The second and third quarter reports indicate that sites AQ1, AQ2, AQ4, AQ6, AQ9, AQ10, AQ11, and AQ12 were monitored for PM<sub>10</sub>. Locations AQ1, AQ2, AQ4, AQ5, AQ6, AQ9, AQ10, and AQ11 were sampled in the fourth quarter. Montana personal indicate that AQ1 was mistakenly removed from the monitoring program in the first quarter.

Although there is a discrepancy in the frequency and location requirements, both the first and second quarter reports show nearly monthly monitoring for 7 locations, which was the requirement. The revision and external submittal of the Environmental Monitoring Plan, and updating of the Dust Control Management plan (if necessary) should clear up the discrepancy in sampling frequency and locations.

There were no exceedances above the World Bank Industry Specific Standard for Mining and Milling for airborne particulate matter (PM<sub>10</sub>) of 500 µg/m<sup>3</sup>. The project EIA&S uses the standard of 150, which is the IFC draft industry specific standard for Precious Minerals Mining. There were air quality measurements between 150 and 500 at 1 station (AQ10) in February of the first quarter, and 5 stations in April of the second quarter (AQ2, AQ4, AQ9, AQ10, AQ11), and one station in the third quarter (AQ12). The quarterly report notes that station AQ10 is influenced by heavy traffic, local markets, and a cattle crossing, all of which may have influenced the air quality at that location, although that location was not elevated in January, March, May, or June. The second quarter report indicates that April is in the dry season, and was especially dry during 2005. Although there were no apparent issues with dust mitigation during the audit, these results indicate that continued diligence for mitigation at these locations/months may be necessary.

## 6.2 Noise

The original draft monitoring plan dictated monthly noise measurements during construction and the first six months of operations. The EIA&S requires quarterly measurements at the same locations as the air quality measurements. The first and second quarter reports indicate that noise was monitored on a nearly monthly basis at five sites in the first quarter (AQ2, AQ4, AQ5, AQ9, and AQ10) and eight sites in the second and third quarter (AQ1, AQ2, AQ4, AQ6, AQ9, AQ10, AQ11, and AQ12). Sites AQ1, AQ2,



AQ4, AQ5, AQ6, AQ9, AQ10, and AQ11 were sampled in the fourth quarter. It is not clear why not all sites were not sampled in all quarters. The revision and external submittal of the Environmental Monitoring Plan should address the discrepancies in sampling frequency and locations.

The World Bank Industry Specific Guidelines for mining and milling do not set a standard for noise. The project EIA&S uses the draft IFC industry specific standards for Precious Minerals Mining (55DbA day, 45DbA night). The recorded values, *averaged for each quarter*, exceeded the EIA&S guideline at 2 stations (AQ5, and AQ10) in the first quarter, 6 stations (AQ1, AQ2, AQ4, AQ6, AQ9, and AQ10) in the second quarter, 6 stations in the third quarter (AQ1, AQ2, AQ4, AQ9, AQ10, and AQ12), and none in the fourth quarter.

## **7.0 SURFACE WATER AND SEDIMENT MANAGEMENT**

The surface water management plan was completed in April of 2005. This plan addresses sedimentation, runoff, acid rock drainage, and monitoring. The IFC Guidelines require an erosion and sediment control plan. This is included as part of Montana's Surface Water Management plan. The EIA&S required surface water quality monitoring on a quarterly basis at 6 locations (SW1, SW1-2, SW2, SW3, SW4, SW5). The first quarter monitoring report indicates that SW1, SW2, SW3, SW5 were sampled monthly, and SW4 was sampled once. The second quarter monitoring report indicates that sites SW1, SW4, and SW5 were sampled monthly, and SW3 was sampled twice. There is no indication why point SW2 was not sampled during the second quarter. Sample location SW1-2 was not sampled during either first or second quarters. The third and fourth quarter reports indicate that all 6 locations were sampled during those quarters. According to Montana personnel, the sampling was conducted by a contractor up until September, 2005. Beginning in September, all surface water points were sampled by Montanan personnel as required by the EIA&S.

Most of the analytes required by the EIA&S were measured in the first three quarters, with the exception of dissolved calcium, dissolved magnesium, dissolved potassium, dissolved sodium, and oils and grease. The fourth quarter report indicates that none of the total metals were measured (dissolved was). Additionally, several analytes were not measured at all, including cobalt, copper, magnesium, strontium, thallium, titanium, vanadium, alkalinity, ammonium, cyanide, fluoride, nitrate, total solids, total suspended solids, COD, and hydrocarbons. The required ecotoxicological tests were not performed on the samples in the first, third, or fourth quarters. There is no indication why these were not measured. Montana personnel indicate that this problem has been addressed with the switch from contractor sampling to internal Montana sampling, as well as the use of a new laboratory, ACZ, with formal establishment of analytical parameter profiles in ACZ's database.

At the time of this audit, there had not been any discharges from the TSF, therefore there are no data for the quality of those effluents at this time.

The EIA&S is inconsistent in its requirements for sediment quality monitoring. In three different locations of the EIA&S it indicates that sediments will be monitored on a quarterly, 6 month, and annual basis. Montana staff indicate that they intend on complying with the annual requirement, and the Monitoring Plan indicates this. The EIA&S requires monitoring of the quality of sediments in streams at the same six locations as the surface water quality measurements. Locations SW1, SW2, SW3, SW4, and SW5 were sampled in the first quarter. There is no indication why SW1-2 was not monitored by the contractor, however, Montana personnel have indicated that SW1-2 is not accessible during certain times of the year.

Most of the analytes required by the EIA&S were measured in all of the sediment samples, with the exception of magnesium, sodium, potassium, tin, oils and grease, and total petroleum hydrocarbons. There is no indication why these were not measured. Montana personnel indicate that this problem has been addressed with the internal sampling program.

The area below the TSF is currently used as borrow area for materials used in construction of the dam. Sediment control from this borrow source has been difficult during the wet seasons. Previous sediment control structures were insufficient during storm events, and were washed away. Sediment has been observed to be redeposited throughout the drainages. Montana currently plans to regrade and revegetate most of these areas prior to the rainy season of 2006, as is required in the Surface Water Management Plan. This should help control sediment source in that area, and reduce sedimentation in the drainages below. Various sediment control structures were observed during the March 2006 visit, in addition, rock dikes and sediment traps are proposed to further reduce sediment from the open areas below the dam. Additional sediment loading from borrow sources and roads in the tailings basin drainage area is planned to be controlled by a series of rock dikes, sediment traps, and diversion structures strategically placed within the drainages prior to the rainy season commencing in 2006. Although sediment within the tailings drainage basin above the TSF dam would be controlled via the TSF, these sediment control measures will reduce loading to the TSF. Sediment is controlled on other areas of the site through various structures. Storm water runoff control structures have been installed along the main access road, as well as on the haul roads around the mine. Sediment traps are included as part of these structures. Erosion and sedimentation appears to be of most concern in the borrow area below the tailings dam.

## **8.0 GROUNDWATER MANAGEMENT**

The EIA&S requires monitoring of three wells (MW2, MW3, and MW4) on a quarterly basis. Well MW3 was impacted by sabotage and had to be closed and capped in 2005, and was replaced by a nearby well named MW3B. An additional well was added to the monitoring program, MW5. The current program, as described in the Environmental Monitoring Plan, includes sampling of all four wells on a quarterly basis.

The first quarter monitoring report shows results for monthly monitoring of MW2 and MW5. The discussion indicates that MW2 and MW4 were dry during that period, and that MW3 and MW5 were sampled. Apparently this was incorrect, as the results show data for MW2 and MW5. It is assumed that MW3 was dry, not MW2, due to the conflicting information. This assumption was confirmed by Montana personnel. The second quarter monitoring report indicates that MW2 and MW5 were sampled monthly during that quarter. MW3 was blocked and therefore inaccessible. Montana personnel indicate that MW4 has been dry since it was developed. Montana personnel confirm that MW4 is probed for a depth to water reading at least quarterly to confirm the well continues to be dry. Wells MW2 and MW5 were sampled in the third and fourth quarters and MW3B was only sampled in the fourth quarter, after its completion.

Most of the analytes required by the EIA&S were measured in all of the groundwater samples of the first three quarters with the exception of dissolved calcium, dissolved magnesium, dissolved potassium, and dissolved sodium. The fourth quarter indicates that several analytes were not measured at all, including cobalt, copper, magnesium, potassium, sodium, strontium, thallium, titanium, vanadium, alkalinity, ammonium, cyanide, fluoride, nitrate, total solids, total suspended solids, COD, and hydrocarbons. There is no indication why these parameters were not measured. Montana Staff indicate that this has been addressed for future samples.

## **9.0 MATERIALS AND WASTE MANAGEMENT**

The Materials and Waste Management Plan was completed in June 2005 and it addresses management of hazardous materials, organic and inorganic solid wastes, liquid wastes, contaminated soil, and other wastes and spills. This plan requires a Transportation of Hazardous Materials plan, which is not complete at this time. Montana personnel have confirmed that a contractor has been selected to develop this Plan in early 2006 with coordination from the Purchasing, Safety, Security, and Environmental departments.

The materials and waste management plan requires that records of all employee training for materials, waste management, risks, and incident response be maintained. These records, including which

employees and what dates the training occurred, were in compliance with the plan, and are updated regularly.

The Materials and Waste Management plan also requires other various records and reports to be maintained. These include (specific to Hazardous Materials):

- Applicable Guatemalan Laws and regulations
- Applicable World Bank /IFC and international guidelines
- Inventories
- MSDS of all materials used at the site
- Inspection reports
- Records of the type and quantity of each waste disposed of on-site or transported off site
- Records of emergency response drills
- Spill reports
- Compliance audits
- Incident documentation

All of those were available at the time of the Audit with the exception of the record of emergency response drills, as none have occurred to date. These records are updated on an as needed basis. Additionally, the Materials and Waste Management Plan requires regular/periodic visual inspections of storage areas and deliveries of fuels, chemicals, and reagents and a checklist form for each of these inspections. Currently, inspection forms are still to be implemented, and are not available for the audit teams inspection.

Montana intends on conducting a formal audit for compliance with the Cyanide code at an indefinite point in the future.

The Waste Management Plan describes the handling of all wastes. Visual inspections from the audit team confirmed that petroleum waste products are managed according to the plan. Additionally, the team inspected different types of storage facilities for various materials and the majority were maintained within the scope of the plan, with the exception of some of the contractors storage and work yards.

Fuels storage appeared to have adequate secondary containment and in general was in compliance with the plan. Some practices diverged from the plan. For example, most drums and containers were labeled; there was some confusion as to the contents of various drums, specifically those stored within contractor areas. Not all drums had secondary containment. Warning signs were not affixed to all areas of storage. There were areas of spillage/leaking, specifically within contractor areas.

The hydrocarbon management issues were concerns in the previous audit as well. However, improvements in these areas have occurred since the previous audit. These items were also of key importance to the Glamis internal audit staff, which indicated that they would be addressed. At the time of the follow up audit in March 2006, very significant improvements were observed in all the areas that had been of concern during the initial site visit. Because this issue has been an ongoing concern, continued diligence is recommended for enforcement of the policies for compliance with acceptable practices and management of these materials, specifically in the subcontractor storage and maintenance yards.

The audit team visited the project landfill, and observed drainage and compaction of oil containing items before placement within the landfill. Used oil is transported off site for recycling. These items are all in compliance with the Materials and Waste Management Plan.

Septic tank and leach field systems are part of the waste management at the site. The audit team observed one recently installed septic tank (for the offices) with effluent flowing out onto the surface of the ground, indicating that the leach field was either not installed, or not functioning. An additional septic system, for the housing area, was inspected during the March 2006 visit. The leach field for this area was insufficient. Montana had begun work to expand the leach field in this area. These issues are not in compliance with the plan, and should be corrected.

## **10.0 TERRESTRIAL BIOLOGICAL RESOURCES MONITORING**

The Fauna Management Plan was updated and completed in June 2005. The plan requires monitoring of the fauna mortality related to activities, process solutions, or traffic at the mine. The number and the amount of species should be recorded by each death and categorized by life form. The Plan also requires a record of the efforts to relocate fauna to more appropriate sites. Records of mortality were observed by the audit team, and they are updated as needed. Additionally, the plan requires records of animal relocation efforts. These were not observed as no animal relocation has occurred on site.

The Flora Management Plan was completed in July 2005 and is inclusive of the Forestry Management Plan. This plan requires rescuing of orchids and bromeliads from trees that are removed from the site. Audit staff observed the greenhouse facilities where the orchids and Bromeliads that had been rescued were being maintained until future relocation to new areas will occur.

Both the Fauna and Flora Management plans require documentation on the recovery efforts across the site, including the number of trees and the species planted and the reclaimed status of the different areas of the mine. Montana had reforested 193 ha at the time of this audit, with 1,011 trees per hectare, which

is above the total required area. There are no documents for the reclaimed status of areas of the mine as Montana has not officially completed any final reclamation at any location at the site.

The Environmental Monitoring plan requires monitoring for habitat, terrestrial fauna, and forest health (as in EIA&S) preformed annually. The EIA&S requires three locations to be monitored annually for vegetation in forested areas, vegetation in non-forested, nematodes, and physical and chemical characteristics of the soil. Plant species richness and Indices of Biological Integrity (IBI) were monitored and recorded in the second quarter 2005 at 4 stations (B3, B4, B5, and B6). Nematodes Genera Richness and abundance, IBI measured second quarter 2005 in 4 stations. Soil laboratory results available monitored in 2 quarter at 24 samples (6 per site), although there was no discussion about the results of these samples. The EIA&S also requires monitoring of forest cover every 2 years. Forest cover was analyzed and reported in the second quarter 2005. The site appears to be in full compliance with the requirements of the EIA&S regarding Flora and Fauna Monitoring.

#### **11.0 AQUATIC BIOLOGICAL RESOURCES MONITORING**

The EIA&S required aquatic habitat, fish species and counts, Macro-invertebrate count and IBI in 5 stations every 6 months (SW1, SW2, SW3, SW4, SW5). The sampling completed in first quarter 2005 at four stations; location SW1 was not sampled due to problems with access, although this location was sampled monthly for water quality. Evidently the contractor did not return at a later date when the location was accessible. All 5 stations were sampled in the third quarter.

#### **12.0 SOCIOECONOMIC CONDITIONS**

The EIA&S requires that socioeconomic conditions to be monitored quarterly, and this was monitored and reported in all 4 quarterly reports. Additionally a survey for the opinions of the people in the nearby communities is required annually, and was reported in the 3rd quarter report 2005. Montana appears to be in full compliance with this requirement.

#### **13.0 CONCLUSIONS AND RECOMMENDATIONS**

Table 1 presents a summary table of the monitoring requirements as a checklist for compliance auditing. This table also includes a summary of the 2005 activities for each item.

The team recommends that the effectiveness of the newly implemented (2006) sediment control structures be reviewed by the 2006 audit, and to determine if controls are adequate to meet the BMP objective.

The team recommends that Montana consider finalization of standards for surface and ground water. The EIA&S indicates that the primary reference for comparison will be the baseline values collected around the site, and where exceedances of these values occur, the Canadian standards will be the second reference values. This process is acceptable, and should be included as part of the Environmental Monitoring Plan. Montana has indicated their intention to complete a Risk Assessment in 2006 to develop site specific standards, which should clarify the values for compliance.

The team also recommends that Montana complete an “as built” construction report for Area 5 WRF.

Findings that need corrective action or explanation:

- Emergency response drills for hazardous materials
- Transportation of Hazardous Materials Plan needs to be completed
- Checklist and forms for materials and waste management inspections
- Correct seepage of sewage from septic system
- Continued diligence on hydrocarbon handling at contractor yards
- Improved consistency with air and noise monitoring stations locations and monitoring
- Correction of missing surface water quality sample data (missing locations and missing analytes)
- Correction of missing ground water quality sample data (missing location and missing analytes)
- The Environmental Monitoring Plan should be revised and submitted to the IFC and to the MARN and MEM, and updated over time, as needed. This plan will clear up various discrepancies located during this audit with regard to sample locations and frequencies. The final Environmental Monitoring Plan should include all of the modifications for the sampling and monitoring requirements, as well as the unchanged requirements, that currently exist within the original TSF Monitoring Plan, and other plans. It is envisioned that this document should wholly contain all of the environmental monitoring requirements of the site, including sampling locations, schedules, measured constituents, and reporting requirements.