



# **International Cyanide Management Institute**

## **Cyanide Code Compliance Audit Gold Mining Operations**

### **Summary Audit Report**

#### **Western Mesquite Mines Inc.**

**Operation name** New Gold Inc

**Operation operator** Western Mesquite Mines Inc

**Operation owner** New Gold Inc

**Responsible manager** Mr Cory Atiyeh

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### Location detail & description of operation

The Mesquite mine is located in the Colorado Desert geomorphic province region of southern California in eastern Imperial County. The mine is approximately 35 miles east of Brawley in the sparsely populated Mesquite Mining District. The site is located south and adjacent to the foothills of the Chocolate Mountains. There is no discharge of water off the site except during a rare major storm event. There are no open water courses near the site.

Mining and processing activities began at the Mesquite Mine in 1985 and have operated continuously since that time. The existing mine consists of open pits, overburden / interburden storage areas, drainage diversions, leach pads and ponds, and associated ancillary facilities. The Mesquite facility occupies a 5,200 acre site of which 3,100 acres has been disturbed by mining and mine related activities. An expansion to the Mesquite operation was approved in July 2002 that involved expanding existing open pits and overburden / interburden storage areas, and construction of drainage diversions.

Mining operations and associated activities were discontinued at the site in May, 2001 and the operation entered a non-mining status however the site continued to operate as leaching and refining operation. In November 2003, the Mesquite Mine was sold to Western Mesquite Mines, Inc., a wholly owned subsidiary of Western Goldfields, Inc. that was then acquired by New Gold in 2009. Western Mesquite Mines, Inc resumed full mining activities in January 2008. The operation's licence to operate is covered by thirty eight operating permits ranging from mining, design and construction of the run of mine heap leach pads and the refinery operation together with decommission requirements. The operating permits contain one thousand six hundred and two stipulations.



### Open Pit Mine Area

The Mesquite Mine is an open-pit, heap-leach low grade operation, which currently employs approximately 270 people. Crews work rotating (day/night) schedules 365 days of the year. Total annual ore production is regulated to a maximum 65 million tons.

Due to the hardness of the rock, all material in the pit is blasted prior to mining. Blast holes are drilled on a designed pattern according to engineering specifications. During drilling, every blast hole is sampled by an automatic sampler on the drill. These samples are then transported to the on-site lab for assaying.

After blasting, the ore/waste boundaries are delineated in the field by using colored flagging or lath. Blasted rock is mined by conventional truck and shovel operations. Shovel operators visually distinguish the material boundaries by the colored flags. The material is then transported to the designated leach pads.

### Process and Refinery Area

Two heap leach pads are currently operated at the Mesquite Mine, (Pads 5 and 6). Leach pads 1 – 4 have been decommissioned and are currently in a drain down mode.

Each of the leach pads is constructed with a composite liner system designed and approved in accordance with State requirements. A permeable geo-textile fabric overlays the composite liner to protect the liner against puncture and to ensure collection of leachate solution from the base of the stacked ore. Ore is stacked on the liner system in twenty foot high lifts to a height of 200 feet although approval has recently been granted by the local county to increase the pad height to 300 feet with total ore processing regulated to a maximum of 65 million tons annually. Side slopes of the stacked ore are maintained at an overall angle of approximately 2:1.

Gold and silver are leached from the ore with a dilute Sodium Cyanide solution applied using a variety of methods, including drip irrigation and wobblers. After passing through the ore via gravity, the cyanide solution is collected by perforated piping installed below the ore and above the primary liner and then directed to the lowest elevation within the heap leach facility.

Leach solution is recovered via gravity from the base of the leach pads piped to the gold adsorption circuits (carbon columns) after which the 'barren' solution is rejuvenated with fresh cyanide and make up water after which the solution is treated for pH and pumped back to the leach pads for additional leaching of ores. Gold and silver are adsorbed onto the carbon particles resulting in the solution becoming barren solution. Additional reagents are added to the barren solution as it is pumped back to the ore heaps and the process is repeated in a continuous manner.

Gold is adsorbed by the carbon in carbon adsorption plant where its collected and trucked in the form of carbon paste to the refinery where the gold is stripped by desorption columns using chemical reagents which in turn is passed through an electrolysis process (electro-winning) resulting in a gold and silver concentrate that is then passed through a high temperature furnace to produce gold / silver dore with the gold content averaging between 86% - 92%. The Dore is shipped off site for further refining.

**Auditor's Finding**

The operation is:

- in full compliance with
  - in substantial compliance with** \* (See below)
  - not in compliance with
- with the International Cyanide Management Code.

\*The Corrective Action Plan to bring an operation in substantial compliance into full compliance must be enclosed with this Summary Audit Report. The plan must be fully implemented within one year of the date of this audit.

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**Name of facility:** Western Mesquite Mines Inc

**Date(s) of Verification Audit:** July 19 – 27, 2010 and March 2 – 18, 2011

I attest that I meet the criteria for knowledge, experience and conflict of interest for Code Verification Audit Team Technical Auditor, established by the International Cyanide Management Institute and that all members of the audit team meet the applicable criteria established by the International Cyanide Management Institute for Code Verification Auditors.

I attest that this Summary Audit Report accurately describes the findings of the verification audit. I further attest that the verification audit was conducted in a professional manner in accordance with the International Cyanide Management Code Verification Protocol for Gold Mine Operations and using standard and accepted practices for health, safety and environmental audits.



**PRODUCTION: Encourage responsible cyanide manufacturing by purchasing from manufacturers who operate in a safe and environmentally protective manner.**

*Standard of Practice 1.1: Purchase cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide and to prevent releases of cyanide to the environment.*

The operation is:

**in full compliance with**

in substantial compliance with

not in compliance with

Standard of Practice 1.1

***Basis for this finding / deficiencies identified:***

A formal contract and purchase order process are in place with an approved supplier, DuPont de Nemours & Co (Contract reviewed). Purchasing documents for the supply of Sodium Cyanide were reviewed and found to be satisfactorily documented and controlled. The supplier is certified under the International Cyanide Management Code.

Purchasing agreements were also reviewed for other chemical substances including reagents for the cyanide process for example Sodium Hydroxide, Hydrochloric Acid and Hydrated Lime.

**TRANSPORTATION: Protect communities and the environment during cyanide transport.**

***Standard of Practice 2.1: Establish clear lines of responsibility for safety, security, release prevention, training and emergency response in written agreements with producers, distributors and transporters.***

The operation is:

**in full compliance with**

in substantial compliance with

not in compliance with

Standard of Practice 2.1

***Basis for this finding / deficiencies identified:***

The operation receives Sodium Cyanide only from Code-certified suppliers, namely DuPont de Nemours & Co and Cyanco. A contract is established by the operation with Sentinel Transportation who is the exclusive Code certified transporter for DuPont. Cyanco's exclusive Code-certified transporter is Transwood Systems. A current permit for the transportation of Sodium Cyanide by night was also on file.

The contract and associated documentation sets out key responsibilities and requirements for the transport of dangerous goods including special requirements for the transport of Sodium Cyanide. The documentation also defines general responsibilities for safety, security, and accidental release prevention, training and emergency response.

Cyanide received from DuPont is shipped in briquette form and labelling and storage requirements for shipment were in accordance with UN requirements (UN Code 1689). The UN code signage was changed to UN 3414 to designate cyanide solution at the commencement of mixing operations.



Emergency response procedures within the transport Emergency Response Manual are satisfactorily defined including responsibility for safety and security. The documentation also includes risk classification and evaluation of the transport route, and unloading transport security, task training for transporters, safety and maintenance of transport vehicles etc., along with emergency response procedures during transport.

A transport manual is maintained by the transport tanker drivers as well as the operation. Transport routes are defined in the manual that have been risk assessed. Selected routes are GPS tracked by the transport company in accordance with the requirements of the US Transport Safety Administration.

***Standard of Practice 2.2: Require that cyanide transporters implement appropriate emergency response plans and capabilities, and employ adequate measures for cyanide management.***

The operation is:

✓ in full compliance with

in substantial compliance with

not in compliance with

Standard of Practice 2.2

***Basis for this finding / deficiencies identified:***

The conditions of contract require that the cyanide transporters are certified under the Code. The contracts also require that the transporters are licensed under US state based legislation for the transport of Sodium Cyanide. The operation maintains confirmation of Code certification for the suppliers, distributors and transporters.

A contract is established by the operation with Sentinel Transportation who is the exclusive Code certified transporter for DuPont. Cyanco's exclusive Code-certified transporter is Transwood. The transporters are licensed for the transport of Sodium Cyanide under US state based legislation. The operation receives and maintains copies of documentation / records to demonstrate chain of custody for all shipments of cyanide.

The transporters maintain an Emergency Response Manual along with capabilities including training, communication and emergency response equipment for responding to emergency situations. In addition, procedures are established and maintained for off-loading and mixing of Sodium Cyanide at the operation's plant facility.

**HANDLING & STORAGE: Protect workers and the environment during cyanide handling and storage.**

***Standard of Practice 3.1: Design and construct unloading, storage and mixing facilities consistent with sound, accepted engineering practices and quality control and quality assurance procedures, spill prevention & spill containment measures.***

The operation is:

✓ in full compliance with

in substantial compliance with

not in compliance with

Standard of Practice 3.1



**Basis for this finding / deficiencies identified:**

The design of unloading, storage and mixing facilities is based on DuPont design standards that are consistent with sound engineering practices for the storage and handling of hazardous substances as well as Responsible Care requirements. The design of the cyanide storage facilities is based on DuPont design standards with complete separation from acids, oxidizers and explosives. The construction of the facility provides adequate ventilation to prevent the build-up of Hydrogen Cyanide gas. The closed circuit mixing system minimizes the risk of contact with external water. The site perimeter fencing minimizes unauthorised entry by the public.

The location of the off loading, mixing and storage areas are situated well away from workers not directly associated with the unloading and mixing operations as well as surface waters and the site perimeter. The cyanide mixing and storage tanks are located on a concrete bunded surface that prevents seepage to the subsurface. Leak detection systems have been installed for the cyanide solution reticulation circuit and the heap leach pads to detect subsurface leaks.

Sodium Cyanide is mostly transported in briquette form and off loading and mixing occurs within a concrete curbed (Bunded) area. Application of Sodium Cyanide solution to the leach pad operations occurs in a closed circuit system that minimizes risk of spillages. The operation utilizes the DuPont Excel II system for cyanide delivery and mixing. The trucks are secured on the cyanide mixing pad that also contains the Sodium Hydroxide (buffering solution) tank, the Cyanide Distribution Tank and the Cyanide Mix Tank. Each tank has separate secondary containment concrete curbing to contain the contents of each tank within the containment of the tank.

The mixing of Sodium Cyanide briquettes is controlled through mixing with water, buffered to a pH of 11+. The mixing process is continued until it is determined that all of the cyanide briquettes have been dissolved and the cyanide is in solution. The mixed cyanide solution is pumped from the Mix Tank, through the tanker truck and into the Distribution Tank for storage and distribution to the heap leach pads. During times when cyanide is delivered in pre-mixed solution from Cyanco, Sodium Cyanide is pumped directly to the Cyanide Distribution Tank.

Emergency response facilities are in place for containing and recovering any leakages from the tanker truck. Random interviews with the tanker driver and plant process workers as well as the Mesquite Emergency Response Team revealed a thorough understanding of requirements for spill containment and recovery.

**Standard of Practice 3.2: Operate unloading, storage and mixing facilities using inspections, preventive maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.**

The operation is:

**in full compliance with**

in substantial compliance with

not in compliance with

Standard of Practice 3.2

**Basis for this finding / deficiencies identified:**

The unloading of Sodium Cyanide is monitored and controlled by the DuPont designed EXEL II system, and along with the associated procedure, define operational control criteria for preventing exposures and releases during the off-loading and mixing activities. Discussions with the Sentential transporter driver revealed a thorough understanding of the EXEL II system along with general safety pr



Appropriate PPE for cyanide mixing and transfer includes rubber boots, Tyvek suit, face shield and high cuff rubber gloves, in addition to normal PPE of hard hat and safety glasses. Within close proximity is an approved oxygen supply and cyanide antidote kit. The initiation of buffered water from the Mix Tank into the tanker truck and back into the Mix Tank is, in addition to having a full-time WMMI observer, also observed by a video camera.

The preparation of cyanide solution from Sodium Cyanide received in briquette form occurs via specially designed bulk sparge containers that allow mixing in a closed circuit thereby eliminating manual involvement by process workers and generation of empty cyanide drums, plastic bags and liners etc. Discussions with process plant personnel and the tanker driver revealed a sound knowledge of the requirements and operating criteria for off-loading, mixing and storage of Sodium Cyanide and reagents. During recent times when cyanide has been occasionally delivered in pre-mixed liquid form from Cyanco, the cyanide tanker truck transport is parked on the mixing pad, as with the other cyanide delivery trucks, and cyanide solution is transferred directly to the Distribution Tank.

An inspection for the off-loading facility using a checklist was completed prior to the off-loading and mixing operations. A log book is also maintained listing prescribed checks for emergency response, PPE, housekeeping etc. The bill of lading for the Sodium Cyanide delivery was also reviewed by the Lead Auditor (BOL 7381144728).

**OPERATIONS: Manage cyanide process solutions and waste streams to protect human health and the environment.**

**Standard of Practice 4.1 Implement management and operating systems designed to protect human health and the environment including contingency planning and inspection and preventive maintenance procedures.**

The operation is:

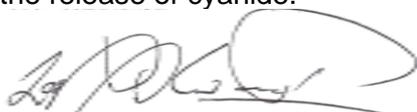
- in full compliance with
  - in substantial compliance with**
  - not in compliance with
- Standard of Practice 4.1

**Basis for this finding / deficiencies identified:**

Operating systems, plans and procedures for the delivery, off-loading, mixing of Sodium Cyanide, and the operation of the leach pads and regeneration of the barren solution after stripping together with the operation of the Carbon Adsorption plant and the Refinery are designed to protect human health and minimize impacts on the environment. Cyanide is delivered to the leach pads via a well designed reticulation and irrigation system that is contained within a closed and impermeable lined circuit.

Standard operating procedures (SOPs) are established that define the operating criteria and controls for the safe and environmentally sound operation of the facility including mixing and application of cyanide solution to the leaching pads and the recovery of pregnant solution, processing of ore through the carbon adsorption plant and through production of the final 'product' (Dore). The operating plans and procedures incorporate design assumptions including volumes and flow rates for cyanide solution, cyanide mixing and application rates, freeboard for storage ponds, etc.

The audit initially identified that the operation had no formal change management policy or procedure in place to identify where changes to WMMI's processes or operating practices may increase the potential for the release of cyanide.



The operation had subsequently amended its Cyanide Safety Plan and commenced the development of a formal policy and procedures to provide a process for review and approval of changes to operating equipment, parameters and practices that could result in an increase in the risk for releases of cyanide to the environment, or potential to increase risk to humans or wildlife. Formal policies and procedures to manage changes in processes, facilities or components continue under development. Accordingly, Standard of Practice 4.1 was deemed to be in substantial compliance with the requirements of the Code.

Regular reviews of the operation's water balance are conducted and the design of the facility is such that upsets in the water balance are automatically directed to the event pond that has twenty four hour capacity for drain down of the pads in the event of a power failure. There is further capacity in the barren pond for containment of upsets in the water balance.

In a situation where temporary closure or cessation of operations is determined necessary due to monitoring or operating conditions that indicate that there is an increased risk of potential effects to human health or the environment, contingency procedures are in place including identification of sources for solutions that have triggered deviations from operational or standard operating conditions; isolation where feasible of source and location and quantification of solutions and potential effects; assignment and activation of emergency personnel including outside agencies, where necessary, to address the required responses to the identified problems, and ensure that backup and contingency controls are operational and fully functioning as needed to address management of cyanide solutions during temporary closure or cessation of operations.

Plant inspection programs using checklists are established and maintained at prescribed intervals for cyanide facilities as well as the general work place / work area inspections the latter conducted by the safety committee. Records of daily pre start inspections were sighted for the unloading and mixing plants, along with area inspections using checklists for the entire facility. Plant inspections and work area inspections were sighted for all process plant areas and mobile plant workshop. In addition, daily operator log sheets were also maintained for recording plant operating data that included for example, water tank levels in the expansion tank for the desorption plant, HCl and strip solution tank levels, boiler and heat exchangers operating temperatures etc.

Leak detection systems are also installed and monitored for the cyanide reticulation system to detect potential leakage from beneath the heap leach pad liner system. There are no underground pipes. In addition, operation inspects the tanks holding cyanide solutions including those identified as critical to the containment of cyanide and solutions on a daily basis for signs of corrosion and leakage, and performs structural integrity testing once every five years, or less if there is sign of potential issues. The checklists are completed to verify inspection and maintained on site.

The operation has established a preventative maintenance program that ensures that equipment and devices function as necessary for safe cyanide management. While a number of daily and weekly schedules are identified for preventative maintenance procedures, the items are prioritized by potential for effects and safe cyanide management as to which are done on a greater frequency. Work orders for plant maintenance were viewed to support the implementation of the current maintenance program. Records of scheduled and reactive maintenance inspections and service of cyanide facilities including the reticulation channels, pumps, boiler etc., were sighted.

The operation has one standby generator of 1.2MW capacity although a power study showed that 2.0MW was recommended. A further study of load factors including amperage revealed that the current emergency standby power requirements were of sufficient capacity to maintain the water balance for heap leach operations.

This was readily demonstrated during a 44 hour mains power outage on July 11, 2010. The standby diesel generator set is tested monthly and quarterly the latter tested under load conditions. Although records for the monthly and quarterly checks were not sighted, maintenance work orders were on file for the listed service inspections and tests.

**Area of deficiency (Standard of Practice 4.1)**

- The audit identified that the operation has not finalized a formal policy and procedure to address management of changes to the process that may increase the potential for the release of cyanide. While this process has been upgraded since the initial site visit, it is not complete and a substantial compliance determination was determined for Standard Practice 4.1.

In practice, the operation ensures through verification of engineering designs and monitoring of operations that the risk for the release of cyanide that could impact on worker safety or the environment does not present an immediate or substantial threat to worker safety or the environmental including wildlife. The deficiency relates to ensuring a robust process is established and maintained for management of change, which is also a requirement of OHSAS 18001: 2007 to which the operation subscribes. Further, the operation has demonstrated good faith in addressing the issue since the initial verification audit.

**Standard of Practice 4.2 Introduce management and operating systems to minimize cyanide use, thereby limiting concentrations of cyanide in mill tailings.**

The operation is:

✓ in full compliance with

in substantial compliance with

not in compliance with

Standard of Practice 4.2

**Basis for this finding/ deficiencies identified:**

The operation is a run of mine heap leach process with the cyanide circuit operating in a closed loop system and hence there are no mill processes or mill tailings. Therefore, Standard of Practice 4.2 is not applicable.

**Standard of Practice 4.3: Implement a comprehensive water management program to protect against unintentional releases.**

The operation is:

✓ in full compliance with

in substantial compliance with

not in compliance with

Standard of Practice 4.3

**Basis for this finding / deficiencies identified:**

A water balance study has been undertaken that took into account the entire operation with the report defining total volumes including the cyanide reticulation circuits, makeup water consumption and effects of defined precipitation events on storage capacity and pumping capabilities. The study also took into account application rates of cyanide solutions applied to the leach pads along with solution losses through evaporation, quality and amount of precipitation entering the event pond, and effects of power outages including capacity to maintain the water balance



In addition, the study included analyses of the capabilities of the operation to manage a 24-hour, 100-year precipitation event for all operating components (heap leach, process ponds, pumping systems, etc.), in addition to stormwater components of the project. The report also acknowledges that there is a net water loss due to very hot and dry ambient conditions of the location and the application of makeup water forms part of the process requirements.

Storage ponds have been designed and are operated with adequate freeboard above the maximum design storage capacity. Inspection of the freeboard in the open barren and event ponds are routinely conducted by the process plant operators.

Contingency plans and backup systems are in place for emergency power for essential services. These plans were recently tested during a live situation following a power failure of forty four hours duration on July 11, 2010. The operation was able to demonstrate that the water balance was maintained during that outage through the stormwater / event pond and barren / intermediate pond, as well as utilising the former carbon adsorption (CIL) tanks.

Process plant operators conduct daily area inspections of all facilities including leach pads, ponds, etc., for ensuring sufficient freeboard is maintained to prevent the unplanned discharge of cyanide solutions to the environment.

The operation records precipitation and the records show an average annual rainfall of 2.4 inches. The very low annual rain in south western California has minimal impact on the operation and therefore revision of design assumptions and changes to operating practices were deemed as not applicable.

***Standard of Practice 4.4 Implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.***

The operation is:

✓ in full compliance with

in substantial compliance with

not in compliance with

Standard of Practice 4.4

***Basis for this finding / deficiencies identified:***

A fauna survey has been conducted and a number of fauna species have been identified including the protected Desert Tortoise. A recent fauna survey by a qualified consultant was conducted in the Rainbow pit 4 extension as part of a routine clearance activity of previously undisturbed area.

All cyanide process solution ponds are permanently covered with a HPDE impermeable cover to prevent access by wildlife as well as evaporation due to the hot and dry climatic conditions. The entire perimeter of the site is also permanently fenced and regular inspections are conducted to ensure that the integrity of the fencing is maintained.

Inspections for wildlife deaths in the leach facilities, channels, ponds and unloading facilities are conducted as part of the routine facility inspection program by process plant operators. Five deaths of small birds were reported in the 2009 Sustainability report that occurred due to inadequate wash down following a cyanide delivery. Remedial action was undertaken at the time including a review of the operating procedures and awareness training for operators to prevent a reoccurrence.



The control of cyanide additions is regulated through the design of the wobbler irrigation system including pressure gauges and adjustment valves that allow for flow adjustment of each lateral to ensure correct delivery rate and spray pattern of the cyanide solution as well as minimizing ponding. Ponding on the leach pads is minimised through the practice of deep ripping and cross ripping by a dozer and the installation of a wobbler sprinkler system for irrigation. Monitoring of the heap leach pads including any excessive ponding is monitored by process operators and application rates are adjusted accordingly.

Training of heap leach operators in the requirements of the SOP for heap leach operation has been completed following the initial site visit in July 2010. The training included requirements for the minimization of ponding to protect avian fauna and other wildlife from adverse effects of cyanide process solutions.

***Standard of Practice 4.5: Implement measures to protect fish and wildlife from direct and indirect discharges of cyanide process solutions to surface water.***

The operation is:

**✓ in full compliance with**

- in substantial compliance with
- not in compliance with

Standard of Practice 4.5

***Basis for this finding / deficiencies identified:***

The cyanide delivery and return system operates with a closed system and there are no direct discharges off site.

Potential seepage from the leach pads has been identified as a source of indirect discharge to surface water. However, the design of the composite liner system underneath the leach pads minimizes the risk of leakage. In addition, leak detection systems are installed and records of ground water monitoring from the vadose wells strategically installed around the leach pads showed negligible levels of cyanide.

However, the operation had identified that cyanide was a potential chemical that was likely to be present in stormwater discharges based on its operations. Pursuant to statewide statutory requirements for a general storm water permit the operation had collected samples from three consecutive precipitation events. Data from the precipitation events and laboratory reports of the analytes showed that total cyanide was not present for the sampling periods (03.08.2001, 10.07.2001 and 02.25.2003). On this basis the operation had initially elected to exclude total cyanide from its stormwater monitoring program. Documentation was on file to support the exemption to sample storm water runoff under the requirements of the Toxic Pollutant Analysis Reduction by the statutory agencies. The operation has since modified its policy and procedures and now samples stormwater discharges from the site for cyanide.

***Standard of Practice 4.6: Implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of ground water.***

The operation is:

**✓ in full compliance with**

- in substantial compliance with
- not in compliance with

Standard of Practice 4.6



**Basis for this finding / deficiencies identified:**

Protective measures are deployed to protect contamination of ground water and the beneficial use(s) of ground water beneath and / or immediately down gradient of the operation. Each heap leach pad is constructed with a composite liner system designed and approved in accordance with state legislative requirements. The cyanide delivery and return system operates in a closed circuit piping system that runs with a pipe canal that is also lined with a well designed impermeable membrane and any seepage would be contained with the lined canals and collected in the event pond. A permeable geo-textile fabric overlays the composite liner to protect the liner against puncture and to ensure collection of leachate solution from the base of the stacked ore.

The ground water quality standard for cyanide is the Federal Drinking Water Standard of 0.2 WAD CN, which has been adopted by the state of California. Permits held by the operation require tracking total and free cyanide (plus other constituents) for groundwater at seven (7) groundwater monitoring wells and WAD CN for surface stormwater (upgradient and downgradient), when present. It is acknowledged however that there were no actual permit or statutory limits set for free and total cyanide concentrations. However, any increases in trends would warrant an investigation / explanation.

Historical records of ground water quality from the bore monitors showed negligible levels for total cyanide and no exceedances of the regulatory limit for surface or ground waters were recorded for WAD cyanide. In addition, the operation has recently implemented a program for monitoring samples of stormwater discharges for the presence cyanide concentrations.

**Standard of Practice 4.7: Provide spill prevention or containment measures for process tanks and pipelines.**

The operation is:

**✓ in full compliance with**

- in substantial compliance with
- not in compliance with

Standard of Practice 4.7

**Basis for this finding / deficiencies identified:**

Each of the storage and process tanks at the unloading and mixing plant has their own sump of sufficient capacity to contain a catastrophic failure of the tank. Cyanide tanks and pipelines are constructed of materials compatible with cyanide and high pH conditions. The delivery and return circuits for cyanide solution and pregnant solution operate within a closed circuit system by a series of pipes and pumps that are contained within a water proof and highly durable HDPE lined canal that would contain any potential leaks with the leaks reporting to the event pond. Leak detection systems for detecting potential leaks below the lined leach pads are also installed and closely monitored.

The design and construction of secondary containment facilities for cyanide unloading, storage and mixing and process tanks have been implemented in line with relevant regulatory requirements including the consent conditions contained within the operating permits. The storage capacity of the bunded areas has been designed to contain a volume greater than that of the largest tank within the containment and any piping draining back to the tank. Spillages from a rupture of the solution pipelines, valves etc., within the piping canals would be contained with the impermeable lined canal with any overflows reporting to the event pond.



Cyanide tanks and pipelines are constructed of materials compatible with cyanide and high pH conditions although no documentation was sighted to this effect. It is acknowledged that the design of the unloading and mixing facilities was based on DuPont design standards and approval for the design was on file.

Procedures are established and maintained to contain and prevent discharges to the environment of cyanide solution or cyanide-contaminated water that is collected in secondary containment areas. The procedures are documented as part of the operation's standard response guidelines within the Emergency Response Plan.

**Standard of Practice 4.8: Implement quality control / quality assurance procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.**

The operation is:

✓ in full compliance with

in substantial compliance with

not in compliance with

Standard of Practice 4.8

**Basis for this finding / deficiencies identified:**

Good standards of quality control and quality assurance procedures were employed throughout the construction phase of the expansion project for the leach pads and cyanide process facilities including cyanide storage, mixing and delivery. A HAZOP study was also conducted for the facility the scope of which included the cyanide unloading, storage, mixing facilities pursuant to state regulatory requirements.

The design and construction of the cyanide unloading and mixing facility and Carbon Adsorption plant including the process tanks was based on DuPont design standards and formal approval for the design was on file.

Approval of the design and construction for the current operation including the heap leach pad expansion project was also reviewed on file along with regulatory approval of the expansion project by the Regional Water Quality Control Board. As built approved engineering drawings and the final design report were reviewed for the expansion project. The consultant's report documents, among other things includes quality assurance requirements that were carried out by the consultant for the construction of the composite liner system along with the pad drain down design, slope stability, site hydrology and diversion etc. Geotechnical reports were also on file for the project civil and earth works.

**Standard of Practice 4.9: Implement monitoring programs to evaluate the effects of cyanide use on wildlife, surface and ground water quality.**

The operation is:

✓ in full compliance with

in substantial compliance with

not in compliance with

Standard of Practice 4.9

**Basis for this finding / deficiencies identified:**

There are a number of well developed programs and procedures deployed by the Environmental Department for monitoring / measuring environmental media including vegetation, water quality (surface and ground water), air quality and wildlife.

The environmental monitoring program and compliance reporting schedule were reviewed and records were viewed for verifying the implementation of the program and reporting schedule. For example, monthly monitoring of HCN at the site perimeter; quarterly ground water monitoring and weekly stormwater (irrespective of a precipitation event – diversion channels in regards to erosion); and monthly inspections of the site perimeter fencing.

The operation is a zero discharge site for process and waste water. Potential for seepage from the leach pads is monitored by the leak detection monitors via bore (vadose) monitors placed at strategic points around the leach operation. The operation monitors ground water at these points and records of bore monitors showed negligible cyanide levels.

The records as sampled from January – June 2010 showed HCN and CN levels were below regulatory, World Bank and Code limits. The January – June 2010 report for quarterly ground water monitoring also showed limits were well below regulatory and Code limits for total CN and Free CN.

Procedures are maintained that document requirements including quality assurance for sampling and monitoring / measurement for water quality analytes and CN. The operation has modified its procedures for inspections and now comprehensively records weather, temperature, wildlife activity, anthropogenic influences for the project area, including WAD Cyanide requirements.

The publically available 2009 Sustainability Report recorded five wildlife mortalities of small non-threatened species of bird in a single incident as a result of a small spillage in the CIC plant. Corrective action including operator training was implemented at the time to prevent a reoccurrence. No mortalities have been recorded since August 2009.

**DECOMMISSIONING: Protect communities and the environment from cyanide through development and implementation of decommissioning plans for cyanide facilities.**

***Standard of Practice 5.1: Plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife and livestock.***

The operation is:

**✓ in full compliance with**

- in substantial compliance with
- not in compliance with

Standard of Practice 5.1

***Basis for this finding / deficiencies identified:***

The operation currently operates under three operating permits for reclamation and closure which have been fully costed for the decommissioning and reclamation of the facility. Procedures for decommissioning of the cyanide facilities have been developed and are documented within the mine closure plan. An existing plant facility has been decommissioned and the operation reported that there are no legacy issues carried over from the previous operators of the plant facility.

The procedures are subject to periodic review noting that the operation has modified its procedures to sample water from the drain down of the decommissioned pads for water quality. Water quantity however was not possible to monitor as most of the weir and drainage collection system has deteriorated and there is no feasible way to ascertain quantity. However, it was deemed that as long as water quality meets closure criteria, quantity is not an issue relative to Standard of Practice 5.1 as quantity is included in the overall project water balance.

A documented Reclamation / Closure Plan is in place for decommissioning and reclamation activities associated with the mine and cyanide plant facilities. In addition, a revegetation plan for the leach pads is also established. A schedule for reclamation is established and records were maintained to support reconciliation of actuals against the mine plan for the decommissioning of heap leach pads.

**Standard of Practice 5.2: Establish an assurance mechanism capable of fully funding cyanide decommission activities.**

The operation is:

✓ in full compliance with

in substantial compliance with

not in compliance with

Standard of Practice 5.2

**Basis for this finding / deficiencies identified:**

The operation has developed and maintains budgeting process with good levels of cost tracking evident for mine closure and reclamation including funding for cyanide decommissioning activities. A technical memorandum (Reclamation Closure Planning) dated February 4, 2010 covers the method of outlining the reclamation liability for the closure of the active leach pads.

A summary of mine closure reclamation costs including cyanide facilities for 2010 was sighted. A documented building and plant inventory was also on file along with cost estimations for demolition of the plant facilities based on third party costs for mobilization, execution of planned activities and demobilisation from site. A report prepared by an external consultant dated 07.24.2010 documents cost estimations for demolition for the major fixed facilities including plant, tankage, pipelines, etcetera as defined by the mine closure / reclamation plan. The report also provides an update on the reclamation liability.

The budget for mine closure including funding for cyanide decommission activities is reviewed and revised annually in line with reviews of the closure / reclamation plan. Evidence was furnished to verify regular reviews and updates of the Reclamation / Closure Plan together with the annual statutory returns to the regulatory agency for updated Reclamation Closure Plan.

**WORKER SAFETY: Protect workers' health and safety from exposure to cyanide.**

**Standard of Practice 6.1: Identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.**

The operation is:

✓ in full compliance with

in substantial compliance with

not in compliance with

Standard of Practice 6.1

**Basis for this finding / deficiencies identified:**

Safe Work Plans are used for identifying hazards and risk control measure for non-routine activities. Procedures are established for cyanide-related tasks such as unloading, mixing, plant operations along with working at heights and confined space entry where cyanide exposure risks might be present. The use of personal protective equipment is prescribed in the operation's Cyanide Safety Plan as well as specific standard operating procedures and Safe Work Plans.



Discussions with the OHS functionaries in the Safety Department along with the Environmental Manager and the process Plant Superintendent and the fixed plant Maintenance Supervisor, as well as operators revealed that OHS risks and exposure to cyanide are well known and understood.

Checks and balances are in place primarily through the site Safety Committee for consulting and involving worker input in developing and evaluating health and safety procedures with the main mechanism being the Safety Committee. Records of the safety committee meetings were reviewed however it was noted that there are no hourly paid employees that hold an elected position on the committee.

The operation had modified its procedures to include for example updating policy and system procedures to review processes and operational changes, and modifications that have potential to effect worker health and safety, as well as incorporating the necessary changes within SOPs, operator training, risk control and work area inspections measures. In addition, a risk assessment is scheduled for 2011 with the objective of results being utilized with in-house processes to complete the requirements for full compliance with this section of the CN Code.

***Standard of Practice 6.2: Operate and monitor cyanide facilities to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.***

The operation is:

**in full compliance with**

in substantial compliance with

not in compliance with

Standard of Practice 6.2

***Basis for this finding / deficiencies identified:***

Discussions with the process plant supervisor and plant operators along with a review of the plant operating procedures indicated that cyanide facilities are operated in a controlled environment that protects operator health and safety. Health and safety measures are subject to regular review through the workplace area inspections by the Safety Committee for cyanide facilities.

The monitoring and control of pH to minimizing the risk of Hydrogen Cyanide gas being formed during mixing and production activities is controlled via the EXEL II system. Personnel and fixed ambient HCN monitors are used where there is risk of exposure to Hydrogen Cyanide gas for example mixing operations. The monitors are subject to monthly inspections and bump test. (Records January – July 2010 reviewed). Records for the two fixed ambient HCN monitors were also reviewed for 2010 covering the full twelve months.

The operation's Cyanide Safety Plan defines the maximum exposure of cyanide for workers of 4ppm. The Plan further stipulates a maximum concentration of 300ppm for exposure to cyanide in solid or liquid form. The appendices to the Cyanide Safety Plan also stipulate the Cal/OSHA PEL maximum exposure on an instantaneous basis for Hydrogen Cyanide of 4.7ppm.

Generally, very good standards of plant nomenclature and safety signage were observed for unloading, storage, mixing and process tanks. Initially, signage including directional flows for the cyanide reticulation pipe work was largely non-existent in a number of areas. This was promptly rectified by the operation. In addition, the operation has posted additional signs around areas of the facility and in particular the heap leach operations where cyanide is utilized specifically identifying that cyanide is in use beyond the point of the signs and that anyone entering must have authority to do so.

The operation utilizes Fendall Porta Stream II eyewash stations at its facility that are portable, self contained systems that deliver a saline solution at the rate of 0.4 gallons per minute for a 15-minute period (16 gallon reservoir). The stations are not connected to a water line, and low pressure delivery is controlled by the station.

A central repository of material safety data sheets (MSDSs) and emergency response information for cyanide and other hazardous substances is maintained. Specific MSDS and safety information are available in areas where cyanide is managed and are printed in English – the language understood by the workforce.

Procedures are established and maintained for reporting and investigating accidents and incidents. For hazardous chemical spills a Material Release Form is completed along with the investigation report. A completed Material Release Form sighted for a 1.5lbs Sodium Cyanide spill on the east side of heap leach pad 6 on 10.20.2009.

***Standard of Practice 6.3: Develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.***

The operation is:

✓ **in full compliance with**

in substantial compliance with

not in compliance with

Standard of Practice 6.3

***Basis for this finding / deficiencies identified:***

Emergency situations have been identified and are documented in the Emergency Response Plan for defined emergency scenarios including accidental cyanide releases. Emergency response procedures for cyanide exposures are documented by way of Standard Response Guidelines within the operation's Emergency Response Plan. The guidelines / procedures are reasonably comprehensive and training records reviewed on file supported the review and testing of the procedures.

Emergency response equipment for responding to emergency scenarios including workers exposed to cyanide is in place and maintained and readily available. For example, self contained breathing apparatus (SCBA), Oxy Viva resuscitator, personnel protective equipment (PPE), and Amyl Nitrate ampules. Alarms and communications system are established and maintained by the Mesquite Emergency Response Team.

An inspection program using checklists for inspecting / servicing of emergency response equipment including first aid kits, self contained breathing apparatus, personnel protective equipment, cyanide antidotes etc., is maintained. Shelf life dates for first aid supplies and cyanide antidotes were checked and found to be in date. The storage of Amyl Nitrate is stored within a temperature controlled environment.

The Mesquite Emergency Response Team is suitably trained (training records reviewed) to provide first aid and medical assistance for identified emergency scenarios including workers exposed to cyanide. A program and schedule for emergency response exercises is in place and records of implementation were available for mock training drills including cyanide exposure scenarios. Records of general emergency response training for mine workers were also verified along with the MSHA mandatory drills. Lessons learned from the training exercises are incorporated into the emergency response training.



A fully equipped ambulance is maintained on site to transport workers exposed to cyanide to the Brawley local hospital where qualified off site medical personnel and facilities are available. Amyl Nitrate antidote is located and maintained at strategic locations including the onsite ambulance vehicle.

**EMERGENCY RESPONSE: Protect communities and the environment through the development of emergency response strategies and capabilities.**

***Standard of Practice 7.1: Prepare detailed emergency response plans for potential cyanide releases.***

The operation is:

**in full compliance with**

in substantial compliance with

not in compliance with

Standard of Practice 7.1

***Basis for this finding / deficiencies identified:***

The Emergency Response Plan (ERP) identifies credible emergency scenarios for solution releases from tank failures and containment areas as well as, but not limited to impacts of power outages, fire including range wild fires, explosion, earthquakes, floods and wildlife mortalities. Responses for transportation incidents are covered in the Transport Emergency Response Plan. A series of documented guidelines and procedures are provided in the Emergency Response Plan for each of the scenarios. Interviews with cyanide operators in the unloading and mixing plant and the refinery generally provided a good insight into the level of understanding of the emergency response procedures.

The scope of the emergency response plan and associated procedures includes potential impact on local communities. The plan also includes strategies such as the limitation of road transport routes for the transportation of cyanide. In addition, nominated transport routes have been risk assessed by the contracted transport company. It is acknowledged that the operation is currently developing a Crisis Management Plan that will incorporate high potential / low probability risk scenarios. The emergency response manual carried by the Code certified cyanide transporter includes emergency response procedures during transport and unloading. Sodium Cyanide is transported to the site in briquette form.

The operation had amended its Emergency Response Plan and this document has been adopted by the operation as official policy and procedure. Documented procedures for responding to failures of leach facilities including uncontrolled seepage and overtopping of ponds have been reviewed and formally incorporated within the Emergency Response Plan.

The operation has scheduled a third party risk assessment for 2011 with the results of this assessment to be included in revising the Emergency Response Plan as appropriate.

***Standard of Practice 7.2: Involve site personnel and stakeholders in the planning process.***

The operation is:

**in full compliance with**

in substantial compliance with

not in compliance with

Standard of Practice 7.2



**Basis for this finding/ deficiencies identified:**

Key stakeholders including representatives from the workforce and local response agencies were involved in the review of the process for emergency preparedness and response. The operation had met with representatives from the Imperial County Fire Marshall's office and the local fire department rescue unit to discuss the operation's Cyanide Safety Plan and the emergency response procedures along with the California Accidental Release Program/Risk Management Plan which is specific to the HAZOP (conducted on 3/27/08) for a Hydrogen Cyanide release. The representatives were given a personalized tour of the cyanide off-loading and storage facilities and were provided with copies of the Cyanide Safety Plan, emergency response procedures and the HAZOP report. The representatives also conducted a site inspection and the inspection report from the County Fire Marshall's office did not identify any areas of non-compliance.

The Brawley local hospital has been identified as the nearest medical facility and communication lines with the medical staff from the hospital have been established.

**Standard of Practice 7.3: Designate appropriate personnel and commit necessary equipment and resources for emergency response.**

The operation is:

**✓ in full compliance with**

- in substantial compliance with  
 not in compliance with

Standard of Practice 7.3

**Basis for this finding / deficiencies identified:**

The Mesquite Emergency Response Team (MERT) is established along with emergency response equipment / facilities for responding to emergency situations. All members of the MERT are certified Emergency Responders with twelve certified Emergency Responder Instructors. Roles and responsibilities of the Incident Commander and management responder are documented together along with emergency notification procedures.

The operation's Emergency Response Plan (ERP) and parent company, New Gold Inc. Crisis Management Plan (CMP), provide a comprehensive description and instructions for responding to emergency situations, including cyanide related situations. The plans identify responsible individuals within the company who will notify outside responders, medical facilities and communities in an emergency situation. A comprehensive list of federal, state and local outside contacts is provided in the ERP. The responsible company official will contact outside support and work with them to determine the role of those outside entities depending upon the emergency situation at hand.

Inspection programs are established and maintained for regular inspection and service of emergency response equipment. Records were reviewed for weekly inspection of fire pumps, monthly inspections of fire hydrants and portable fire extinguishers, automatic fire sprinkler systems, HCN monitors etc.

**Standard of Practice 7.4: Develop procedures for internal and external emergency notification and reporting.**

The operation is:

**✓ in full compliance with**

- in substantial compliance with  
 not in compliance with

Standard of Practice 7.4



**Basis for this finding / deficiencies identified:**

Procedures for incident reporting and investigation are in place and include internal and external emergency notification to management and the regulatory agencies of hazardous chemical spills including cyanide incidents. The Emergency Response Plan includes relevant contact details for notifying potentially affected communities. The plan also includes authority and responsibilities for dealing with the media.

**Standard of Practice 7.5: Incorporate into response plans monitoring elements and remediation measures that account for the additional hazards of using cyanide treatment chemicals.**

The operation is:

**✓ in full compliance with**

- in substantial compliance with
- not in compliance with

Standard of Practice 7.5.

**Basis for this finding / deficiencies identified:**

Standard emergency response guidelines within the Emergency Response Plan include risk mitigation measures for additional hazards associated with cyanide and other hazardous substances including reagents and recovery of solutions and decontamination of contaminated media along with post response mitigation measures.

All drinking water supplied at the Mesquite Mine Operation is bottled water provided by a local vendor. No change to this practice would be required.

The operation had amended the Emergency Response Plan to mandate that hydrogen peroxide is only to be used under the supervision of the Metallurgist and / or the Environmental Manager or trained designee, that the treated solution must be of a concentration of less than 300 mg/ ltr of cyanide, and that it will only be used in areas where excavation of such material is not feasible. For example, rock areas or soils or materials that are inaccessible. The CN Code specifically states that it should not be used in "surface waters" of which there are none in the vicinity of the Mesquite Mine operation.

The organization's Emergency Response Plan establishes standard response requirements for handling accidental cyanide releases. Sampling methodologies, parameters and, where practical, sampling locations are recognised by the MERT and the Environmental Department.

**Standard of Practice 7.6: Periodically evaluate response procedures and capabilities and revise them as needed.**

The operation is:

**✓ in full compliance with**

- in substantial compliance with
- not in compliance with

Standard of Practice 7.6

**Basis for this finding / deficiencies identified:**

Periodic reviews of the Emergency Response Plan are conducted by the Mesquite Emergency Response Team to assess and evaluate its suitability and adequacy. The Emergency Response Plan was revised in October 2010 following emergency response training provided by DuPont. It was also noted that the Emergency Response Plan was submitted to Imperial County Fire Department for review.

A schedule of mock emergency drills including cyanide emergency scenarios is in place based on risk and evaluation of the Emergency Response Plan. Planned mock drills for cyanide spills have been conducted by the Mesquite Emergency Response Team. In addition, training for cyanide poisoning has also been conducted by the Mesquite Emergency Response Team (Training records dated 06.17.2010 reviewed).

Documentary evidence of the evaluations is maintained to support the training drill evaluation outcomes including strengths and weaknesses along with the capabilities of the emergency response personnel and facilities, and recommendations for improvement. However, greater rigour could be applied to formally documenting records for evaluations of emergency response drills. (Records limited to hand written notes and completion of a checklist).

**TRAINING: Train workers and emergency response personnel to manage cyanide in a safe and environmentally protective manner.**

***Standard of Practice 8.1: Train workers to understand the hazards associated with cyanide use.***

The operation is:

✓ **in full compliance with**

in substantial compliance with

not in compliance with

Standard of Practice 8.1

***Basis for this finding / deficiencies identified:***

Training programs including refresher training are established and maintained for all workers including cyanide process plant operators. Department based training is provided for plant operators that covers specific hazards and risk associated with the storage, mixing and leaching reticulation system.

Operators have been trained and assessed in the requirements of the Cyanide Safety Plan and cyanide hazard awareness along with general emergency response for cyanide exposures with the most recent training conducted in August 2010. Feedback from plant operators and mine workers contacted during the site audit indicated a positive response to the level of training provided by the operation.

Training records are maintained by the Safety Department and a review of the records on a sample basis verified that training is conducted in accordance with defined plans and statutory requirements.

***Standard of Practice 8.2: Train appropriate personnel to operate the facility according to systems and procedures that protect human health, the community and the environment.***

The operation is:

✓ **in full compliance with**

in substantial compliance with

not in compliance with

Standard of Practice 8.2



**Basis for this finding / deficiencies identified:**

Competency based training program for process plant operators incorporates specific requirements for the safe operation of the facility that presents minimum risk to worker health and safety, the community and the environment. Operators are trained in the implementation of the standard operating procedures for the safe operation of the facilities. Persons delivering both in-house training and externally provided training were appropriately qualified to provide task training related to cyanide management activities.

The operation trains its employees prior to working with cyanide as part of the MSHA 5023 New Miner training along with training in hazard identification. In addition, cyanide process workers are trained in the requirements of the standard operating procedures.

Training records including relevant competency assessment records are maintained by the Safety Department for each employee and include the names of the employee and trainer, training date and the topics covered. Records of competency assessments reflected the critical requirements of the standard operating procedures.

**Standard of Practice 8.3: Train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.**

The operation is:

in full compliance with

in substantial compliance with

not in compliance with

Standard of Practice 8.3

**Basis for this finding / deficiencies identified:**

The Mesquite Emergency Response Team is fully trained and accredited to respond to worker exposures and environmental releases of cyanide. Operators and personnel working directly with cyanide receive emergency response training for responding to cyanide incidents as part of their area specific induction and task training. The training includes operator response to exposures and accidental releases of cyanide, and the administration of Amyl Nitrate. The Mesquite Emergency Response Team has established and maintains contact with the emergency response authorities and the hospital.

Simulated mock emergency training are planned and conducted periodically by the Mesquite Emergency Response Team. The scope of the mock drills covered cyanide worker exposures to workers and mitigation of environmental releases.

Cyanide refresher training has been conducted by DuPont and attendance records sighted demonstrated that all key operations personnel and fixed plant maintenance workers had satisfactorily completed the training.

**DIALOGUE: Engage in public consultation and disclosure****Standard of Practice 9.1 Provide stakeholders the opportunity to communicate issues of concern.**

The operation is:

in full compliance with

in substantial compliance with

not in compliance with

Standard of Practice 9.1



**Basis for this finding / deficiencies identified:**

Public consultation and disclosure are a major focus for the operation and community consultation and engagement are actively promoted. Discussions with the Community Relations Manager provided a good insight into the level of consultation and communication regarding stakeholder concerns. The operation is seen as proactive in disclosure and issue resolution as noted in the 2009 Sustainability Report.

Evidence of regular community consultation and communication regarding hazardous substances and other issues was reviewed including consultant reports and records of community meetings. Records of the consultative committee meetings provided a reasonable insight into the levels of discussion on operational and environmental matters in particular operational and health and safety issues for concern.

**Standard of Practice 9.2: Initiate dialogue describing cyanide management procedures and responsively address identified concerns.**

The operation is:

**✓ in full compliance with**

- in substantial compliance with  
 not in compliance with

Standard of Practice 9.2

**Basis for this finding / deficiencies identified:**

The operation has a full time, on-site Community Affairs Manager and provides tours to stakeholders on an "as requested" basis, with tours being routinely provided numerous times each year. In addition, any phone calls from stakeholders are handled by the Community Affairs Manager, and questions answered either verbally or with written backup. "Open House" days are also periodically held at the Mesquite Mine to allow the worker's families, the public and stakeholders to view the operation and be provided with answers to personal questions that they may have.

The operation's parent company, New Gold Inc., maintains on their website, [www.newgold.com](http://www.newgold.com), an Annual Sustainability Report which provides information on environmental, community and social commitments and performance for all New Gold operations to all interested parties and stakeholders. The website also provides contact information for the corporate office and all operations to allow stakeholders to obtain additional information.

Overall, good levels of dialogue and engagement were evident involving key stakeholders including the state and local county regulatory agencies and local communities regarding cyanide operations. No issues were evident in the records reviewed during the assessment.

**Standard of Practice 9.3: Make appropriate operational and environmental information regarding cyanide available to stakeholders.**

The operation is:

**✓ in full compliance with**

- in substantial compliance with  
 not in compliance with

Standard of Practice 9.3



***Basis for this finding / deficiencies identified:***

The operation and its parent company, New Gold Inc., have developed written descriptions of how the company and the operation manage cyanide within internal policies, training materials and operational procedures and checklists. This information is available to interested communities and stakeholders through the New Gold website and by contact to the WMMI Community Affairs Manager. These procedures and policies are also provided to stakeholders requesting this information on tours and open door opportunities. In addition, the Emergency Response Plan is part of the Hazardous Materials Business Plan update that is submitted to the California Department of Toxic Substances Control and is publically available for interested parties including the local community.

Relevant information regarding operational safety and environmental matters is made available to regulatory agencies and operations' personnel. English is widely understood by the greater majority of the population in the surrounding communities. Spanish is also spoken by a significant portion of the population and where English is not understood translation is available.

The operation has also developed a community outreach plan in conjunction with its public relations firm to identify regional demographics and appropriate targets and activities including the provision of appropriate information on the operations activities and environmental performance. Formal outreach training was conducted during 2010 by DuPont for selected members of the regional regulatory community. For example, the county Fire Marshall, county Air District, regional Department of Toxic Substances Control (regulate tanks with hazardous materials), and the local office of the Bureau of Land Management (landowner).

Further, the operation released its first and publically available Sustainability Report during 2009. The report is worthy of note with good levels of openness and integrity seen in reporting against key environmental goals, issues and regulatory compliance.

Through rigorous management of operations and cyanide processes, the operation has not experienced a cyanide exposure on or off site resulting in hospitalization or fatality at the Mesquite Mine. Further, there have been no off site exceedances of limits for environmental exposures for cyanide as set by regulatory permits, CN Code and the World Bank Group EHS Guidelines for Mining.

As described in the operation's Emergency Response Plan, should such an unlikely incident occur including releases that are, or that cause applicable limits for cyanide to be exceeded, the event would be reported under permit conditions and applicable regulations to the appropriate federal, state and local agencies as listed in the Emergency Response Plan. In addition, the operation would also provide a news release to the local media and would provide information to individuals or other sources on request. Further, the incident would be included in the New Gold Annual Sustainability Report that is available at any time on the company website.

