



# COMMUNITY ENVIRONMENTAL MONITORING PROGRAM



# *Salmon Trout River*

## WATERSHED MANAGEMENT PLAN

Water Quality Protection, Habitat Restoration  
and Pollution Prevention

Supporting the recommendations of the  
Lake Superior Binational Program



Provided by the  
Superior Watershed Partnership

Funded through the  
Michigan Department of  
Environmental Quality and the  
US Environmental Protection Agency

Carl Lindquist, executive director of the Superior Watershed Partnership, left, talks at a press conference in Marquette Thursday about the new formal agreements between his organization, Rio Tinto and the Marquette County Community Foundation to independently monitor the Rio Tinto Eagle Mine. Also pictured, from left, Simon Nish of Rio Tinto, Mark Canale of the foundation and Jerry Maynard, a spokesman for the monitoring program. (Journal photo by Matt Keiser)



# WATCHDOG

Rio Tinto joins with local groups for environmental monitoring



A worker drills the tunnel to the Rio Tinto Eagle Mine in Michigamme Township. A new community environmental monitoring initiative announced Thursday will monitor activities at the mine, the Humboldt Mill and along associated transportation routes. Rio Tinto will contribute \$300,000 to the effort each year. (Rio Tinto photo)



**Rio Tinto Eagle Mine  
Community Environmental Monitoring Program Agreement**

**By and between**

**Kennecott Eagle Minerals**  
(doing business as Rio Tinto Eagle Mine)

**And**

**Superior Watershed Partnership**

**Funded through the  
Marquette County Community Foundation**

**Community Environmental Monitoring Program  
Non-Endowed Fund Agreement**

**Between**

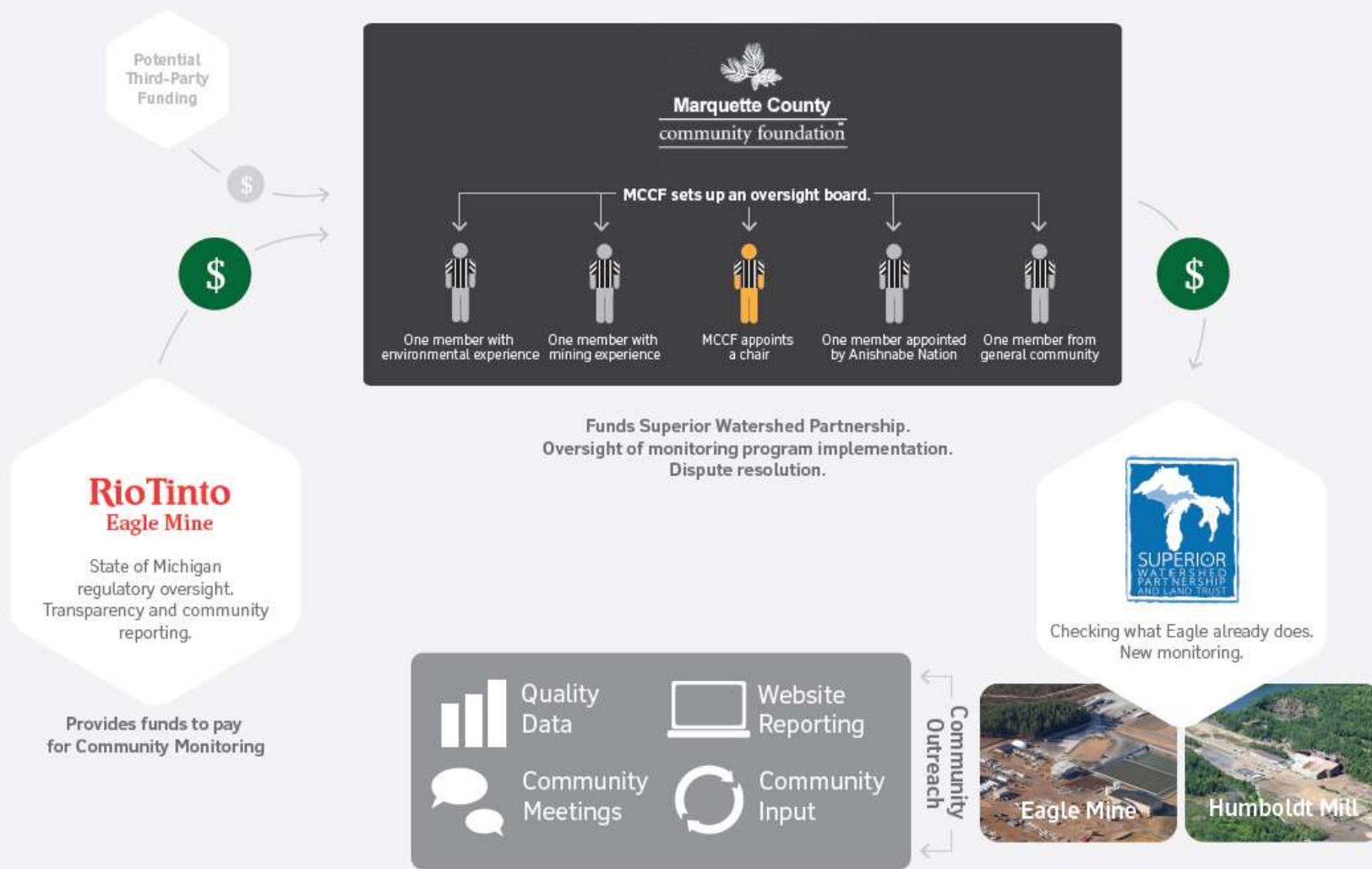
**The Marquette County Community Foundation**

**And**

**Kennecott Eagle Minerals Company**  
(doing business as Rio Tinto Eagle Mine)

# Community Environmental Monitoring of the Rio Tinto Eagle Mine

Rio Tinto Eagle Mine already has State of Michigan regulatory oversight. In addition, independent third-party monitoring provides community oversight of the mine's environmental performance. This is how it works:



# Community Environmental Monitoring Program (CEMP)

## Verification Monitoring

Verify permit requirements

- Observation
- Procedures Review
- Trends Analysis
- Duplicate or Split Sampling

## Additional Monitoring

Non-permit Required Such as:

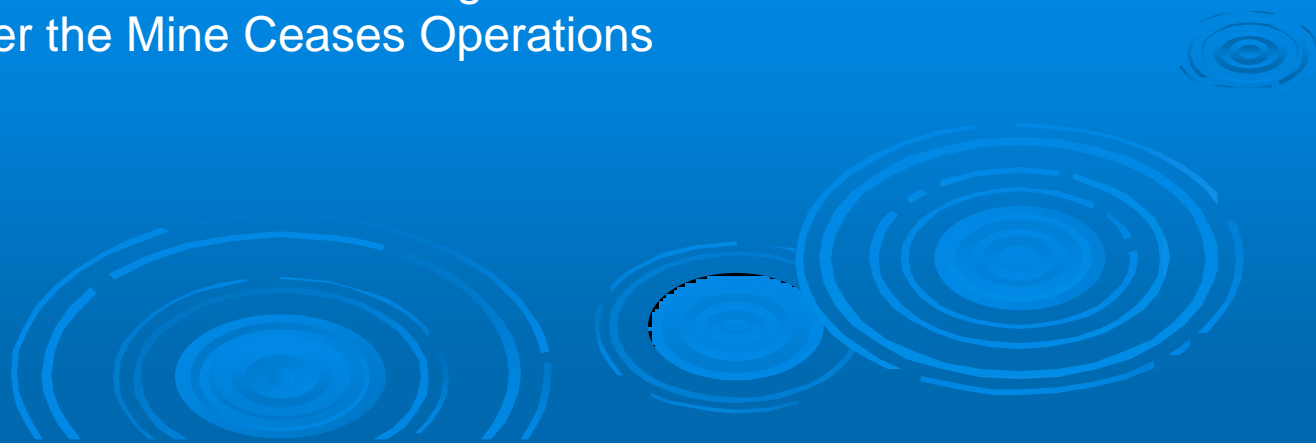
- Air quality
- Flora/Fauna
- Transportation Route
- Public Recommendations

## Monitoring All Phases

Construction – Happening Now

Operation – Mine Now Scheduled to Begin Production in Late 2014

Reclamation – After the Mine Ceases Operations



# CEMP Web-Based Public Data Portal



## Community Environmental Monitoring Project

### Independent Evaluation of Rio Tinto's Eagle Mine

[GWDP HOME](#)[DATA EXPLORATION](#)[GROUNDWATER CHEM](#)[WTP EFFLUENT](#)[DATA DOWNLOAD](#)[MAP](#)[PROVIDE FEEDBACK](#)

#### GWDP Monitoring Location Query

Choose wells:

- ☐ All  
☒ Compliance  
☐ Background

Choose:

- ☒ All samples  
☐ Above permit levels (only apply to compliance wells but also shown for background wells)

Select period:

- ☐ Full record  
☐ Baseline (May 2008-Sept 2011)  
☒ Operational (Oct 2011-present)

Explore parameters (group names in blue):

Metals

#### Query results:

Location	Parameter	Sampled	Above Permit Level	Min	Max	Units
QAL008A	Antimony	4	0			ug/L
QAL008A	Arsenic	4	0			ug/L
QAL008A	Barium	4	0	5.4	5.4	ug/L
QAL008A	Beryllium	4	0			ug/L
QAL008A	Boron	4	0			ug/L
QAL008A	Cadmium	4	0			ug/L
QAL008A	Chromium	4	0	1.1	1.6	ug/L
QAL008A	Cobalt	4	0			ug/L
QAL008A	Copper	4	0	1.2	3.7	ug/L
QAL008A	Iron	4	0	21	43	ug/L
QAL008A	Lead	4	0			ug/L
QAL008A	Lithium	4	0			ug/L

[Table of Contents](#)[Zoom In](#) [Zoom Out](#) [Full Extent](#) [Prev Extent](#) [Next Extent](#) [Pan](#)



## Community Environmental Monitoring Program Independent Evaluation of Rio Tinto's Eagle Mine



### Latest

#### Follow-up Monitoring Confirms Uranium Controlled at Mine Site

Marquette, MI – April 8, 2013

Follow-up monitoring conducted by the Superior Watershed Partnership (SWP) confirms that the trace amounts of uranium recently detected at the Rio Tinto Eagle Mine are controlled on the mine site. The SWP Community Environmental Monitoring Program (CEMP) recently conducted additional monitoring that confirmed the water treatment plant is effectively removing uranium before the water is discharged or recycled back into the mining process.

[Read More](#)

#### CEMP Detects Uranium at Rio Tinto Eagle Mine

Under the Community Environmental Monitoring Program (CEMP) agreement announced in October

# LSWP shows laudable desire for independence

April 15, 2013

The Mining Journal

Save |      

Two recent issues addressed by the Lake Superior Watershed Partnership have demonstrated greatly desired independence in the group's Community Environmental Monitoring of Rio Tinto's mining activities in Marquette County.

Despite the program's indirect funding by the mining company -which many people have been critical of- recent partnership commentary on an amendment to Rio Tinto's air quality permit and the group's detection and reporting of concentrations of uranium found in water samples at the bottom of a rock storage area at the Eagle Mine show the partnership is taking its role as an environmental watchdog over Rio Tinto's mining activities seriously.

This is a positive step, which should help transform at least a few critics into supporters.

At a recent public hearing on the air quality permit, the partnership offered several important and helpful comments, including suggestions on improving computer modeling of pollution dispersion by using data sets more germane to the local area, including the Yellow Dog Plains, where the mine is located.

The Michigan Department of Environmental Quality will issue a decision soon on the permit amendment, taking written and verbal comments from the public, including those from the partnership, into account.

Recently, small concentrations of uranium were found in water in the lining of the mine's Temporary Development Rock Storage Area at the mine. Partnership technicians were sampling water from a sump to compare with prior test samples taken by Rio Tinto.

A laboratory in Indiana processing the water samples for the partnership, found the uranium and reported its occurrence as required by law for concentrations exceeding safe standards for



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