

MEMO TO: G. HALVERSON, B. HAGAN, D. DICKSON

FROM: SHARON KERR

DATE: NOVEMBER 11, 1991

SUBJECT: URINARY ARSENIC VALUES

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The lab at Nerco will report our arsenic levels in  $\mu\text{mol/L}$  if we wish. I think this will avoid confusion for our workers who are used to these values.

Using this measure, the Alberta Health and Safety Laboratory suggested normal value is under 4 for industrially exposed people. They also suggest that action be taken for levels greater than 5.3  $\mu\text{mol/L}$

We require a protocol so that the lab, the doctor, the workers and we ourselves know what to expect. I have talked with Eric Madsen at Nerco and John Craven at Campbell Mine regarding their programs.

There was quite a variance in the two programs. However, Nerco was dealing with an actual arsenic plant and were testing their workers on a daily basis. Campbell on the other hand, is dealing within guidelines and legislated limits.

Amalgamating these two and the Alberta Health and Safety Lab suggestions, I have come up with the following.

NORMAL RANGE  $<4 \mu\text{mol/L}$

Automatic speciation for 4  $\mu\text{mol/L}$  or greater. The lab would notify us of the level and the fact that a speciation was being done. A repeat sample would be collected. (Nerco suggests we should also have the person tested every day of their four days off to ensure that the level is falling off.

If speciation shows 100% occupational, worker is removed from arsenic exposures until two consecutive samples test  $< 2.13$ .

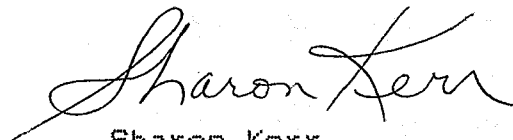
Levels of 5.3 or greater would follow the same procedure except that they should trigger immediate removal from arsenic exposure.

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The other decision needed is what day of the work cycle we will test our employees. In the interest of accuracy Nerco thinks we should test on both day 1 and day 4. However given our low exposures, I think one test is probably sufficient. Day 4 would give us the maximum exposure and the highest confidence level.

We have discussed having the results sent to Dr McGlynn who will review them and inform the employees of their level. This should give the fellows a feeling that they are being seen by an "outside" authority.

Dr McGlynn was greatly reassured by the information that you presented him with on his recent tour. Once we have set our protocol we will go over it with him.

A handwritten signature in cursive script that reads "Sharon Kerr". The signature is fluid and elegant, with a large initial 'S' and a long, sweeping underline.

Sharon Kerr  
Occupational Health Nurse