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# Manitoba Federation of Labour Submission to Ewing Inquest

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Supplemented by oral presentation  
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## **Background – The Event**

On August 8, 2000 Steve Ewing, Rolly Pruden, Tom Wolokoff and their co-workers were washing dust from the beams, walls and ceilings of the area above the copper melting furnace of Hudson Bay Mining & Smelting's smelter in preparation for demolition and rebuilding the furnace's brickwork. Kelvin Primrose and Brad Russel were washing down the area west of the furnace; Richard Moore, Darren Stular and Chris Oliver were on the furnace's north side where holes were being created in the wall.

At the same time, on the east side of the furnace, Barry Fox, Brian Barrett, Robert Cassan and Gerald Wilson, were stripping pipes and materials from the exterior to aid in the tear down. All these workers were on different floors, four on the bottom floor, five on the middle or feed floor and three on the top or Calcine floor.

The furnace had been shut off at 11 PM on August 7 and the washing down of dust had begun about 11:30 PM. Two hours and fifteen minutes later, sufficient amounts of water had accumulated in the furnace that somehow became mixed with molten metal under the surface's crust. Ewing and Pruden were on a narrow catwalk, 21 feet directly above this volatile mixture when a series of explosions occurred.

In the final tally, eleven workers and two supervisors suffered life changing injuries as a result of the explosions and Ewing, a young father, died as a result of his injuries. Hundreds of other workers have suffered trauma and psychological injuries that lasts until today. All of the families involved and many of the townspeople of Flin Flon are still haunted by this explosion.

On January 13, 2004 an Inquest was convened in Flin Flon to investigate the evidence related to the death of Steve Ewing. This inquest is expected to make recommendations so that no other worker will die in similar circumstances.

## **The Manitoba Federation of Labour**

The Manitoba Federation of Labour represents over 96,000 workers in the province – including those in both the public and private sectors. Their workplaces include manufacturing, mining and forestry, transportation, construction, office and technical, education as well as many others. The condition of occupational health and safety in all Manitoba workplaces has been a focus of the MFL since its inception in 1956.

The MFL requested standing at the Inquest to provide insight and assistance into protecting the workers of Manitoba from situations in like industries and workplaces where they are exposed to molten metals. The MFL has also participated in the public review of the Workplace Safety and Health Act in 2001. Our goal is to ensure that recommendations arising from this Inquest are included in the Act's body of regulations and to offer advice to prevent similar deaths from occurring in the future.

## **The Hearings**

Testimony presented at the hearings relied on people's recollection of events that had occurred eight years ago. In some cases just three or four years had elapsed, but in other cases questions addressed events that occurred prior to a similar shutdown in 1997.

With this passage of time in mind, we have grouped some of the details in testimony to develop an overview of the most likely chain of events that occurred. This information deals with details that were seen from differing perspectives. Witnesses had assigned different levels of importance to them but we are sure of a number of facts.

We know that water was used to remove dust and was applied by fire hoses. We know that most workers had received some level of training that evening to do jobs and tasks that were not part of their regular duties.

We know that safety had been a consideration of management but the workers felt that it did not receive a high enough level of importance. Responsibilities included in the Workplace Safety & Health Act, had been understood in a general way and everyone was aware of the role of the Mines Inspector. Most importantly, everyone was fully aware that workers had a right to participate in joint safety committees and to refuse dangerous work.

Everyone was aware that there was a safety program within management's systems that was intended to protect both the workers and the workplace from accidents. When it came to hazards, particularly when water and molten metal became mixed, those who worked in the smelter knew it would cause an explosion. Everyone was so familiar with this possibility that they treated small explosions as a normal occurrence, even expected, to the point that it was regarded as a part of daily events in the smelter.

These points were common in all the testimony. We must note that along with documentary evidence, there were four key witnesses that gave testimony that we are relying on for our analysis. Two are workers, Rolly Pruden and Tom Lindsey, and two are managers, Ray Gauthier and Alan Hair. These four gave the clearest evidence on which to base recommendations that will prevent a re-occurrence in molten metal industries in Manitoba.

## **Preparations for the Job**

We heard testimony from Rolly Pruden about the events on the night shift of August 7-8, 2000. Workers started the shift removing molten material from the furnace until the fire was turned off and they joined the others as part of the wash down crew. The wash down was being done by workers who had not performed the task before and trusted the foremen, managers and supervisors to oversee and ensure that they were doing the job properly and safely.

We heard testimony from Ray Gauthier that planning for the shutdown had begun in September 1999. This planning had included all the repair tasks, a "Gas Handling Project", the shutdown and startup of the furnace and that a special focus was placed on health and safety. Testimony and documents submitted in evidence confirm that safety was listed as one of the top agenda items of the planning committees.

We also heard testimony from Alan Hair that safety is an integral part of the management system and that the company had a program in place to address workplace safety. Mr. Hair also testified that the planners had reviewed information from previous shutdowns of the reverberatory furnace to ensure that all known injuries and incidents were addressed in the planning process.

We heard in the testimony of Tom Lindsey that the size of HBMS operations includes many processes occurring throughout the vast complex and the underground mines as far away as Snow Lake that he and the various safety committees were also involved in. Mr. Lindsey also testified that the laws in place to allow workers the right to refuse unsafe work succeed to a limited extent but could be made to work better and less stressful for the workers.

With this much planning and attention to safety, how could a catastrophic event happen? To answer this important question we need to carefully examine and analyze the testimony and evidence that has been submitted during the Inquest to identify the failures that occurred and led to the death of Steve Ewing.

## **Planning**

Planning for the task commenced on September 9, 1999 with a meeting of nine managers who would later become the Core Team. They met again on September 21, 1999 to assign responsibility for twelve different elements of the shutdown. Bill Fulford was assigned the responsibility for safety but he was not in attendance at the meeting.

On September 29, 1999 Pat Merrin was assigned responsibility for the critical tasks and shut down plan and Ray Gauthier would be responsible for job procedures.

The next full meeting to plan for shutdown was held on October 26, 1999 and all smelter employees were invited to attend. At that meeting it was noted that there was a good turnout of trades people but there was a lack of operating personnel. In the notes, there are 5 bullet points under safety but noticeably absent is any mention of hazard identification or safe job procedures.

Meeting minutes from November 8, 1999 indicate that there was a discussion about the teams and tasks that covered all aspects of the shutdown and the twelve special maintenance projects that were being planned in conjunction with the furnace rebuild.

From there, specific teams would begin to meet on a regular basis to plan their individual projects. These were:

- Core team
- Safety team
- Reverb team
- Boiler/Powerhouse team
- Traffic Warehouse/Material/Equipment team
- Spill Gas core team/Tie-in project
- Scheduling/Manning & Cost control team
- General team
- Teams for Projects other than Reverb/Powerhouse.

Team meeting minutes show that safety was the first item for discussion and had been allocated 5 or 10 minutes. At the early meetings in October and November there were no items listed or discussed under the safety agenda item. The first notation of safety issues raised is found in the December 3, 1999 Reverb Team minutes. First, is a reminder to drive slowly because of slippery roads and the second cautions that boiler water is not to be treated as regular water.

At the December 10, 1999 Reverb Team meeting, safety items raised were:

- an explanation of safety issues around re-positioning of jog burner
- a reminder to recondition rollers for shut down
- slipping hazards were pointed out
- there were concerns about visibility around the ZPL and everyone was cautioned to drive accordingly
- an accident occurred with slag in sand posing a danger for people shoveling sand.

It would appear that many of these items are not related to the tear down or rebuild of the furnace.

At the December 17, 1999 meeting the Reverb Team discussed two items under safety. The first item identified that the emergency showers in Converter & Reverb were not working and that repairs were being made. The second item cautioned against working for long periods of time outside in cold weather.

This trend of non shutdown related safety items, such as ice buildup, slippery roads and poor visibility continues throughout many of the Reverb and Smelter Shutdown Core team meetings.

There were, according to exhibit #24, approximately 100 meetings held by various teams and committees all related to the August 2000 shutdown. Almost all the minutes and memos call for distribution to a specific list but it is difficult to assess which sets of

minutes were actually posted on bulletin boards. The Workplace Safety and Health Act requires that all safety meeting minutes be posted on bulletin boards in the workplace.

From the outset of the shutdown planning, safety was listed on the agendas as a high priority of the meetings but it wasn't until November 8, 1999 that Bill Fulford, safety supervisor, attended a meeting. It would be February 7, 2000 before the Safety Team actually held a meeting. At that meeting, there was a presentation on the Zinc Plant shutdown. A number of topics were raised that formed the agendas for the following meetings up to August 3, just prior to shutdown. Topics covered were:

- orientations
- lockout
- personal protective equipment
- promotion
- accident reviews
- safety supervisors
- radios.

As we assessed the documentation connected to this new sub safety committee, we found that there was no discussion related to a committee mandate. The committee seemed to operate without knowing what the expectations of the Core Team was in relation to the upcoming shutdown.

Follow up Safety Team minutes dealt with promotion of safety and establishing a slogan and award system. Hazards would be addressed with Safety Contacts, which are a series of one page documents on safety topics of concern that were read to all workers at their shift team meetings prior to commencement of work.

At the February 7 meeting one item stands out: ***Wash down of the reverb at shutdown - wall to wall - discuss with core team.*** There is no indication that this concern was raised at the Core Team meeting, nor is there any reference in the subsequent minutes that the Core Team responded. Testimony from Tom Lindsey shows the Core Team had not provided more information for the shutdown safety committee to review and respond with concerns or possible hazards. Mr. Lindsey noted if they had known fire hoses were being used so soon after fire off, he would have voiced concerns about water accumulation.

The Core Team used a standard Risk Management style that identified tasks and potential injuries so job procedures can be developed to control the potential for an accident. To begin this process, a memo was sent on February 14, 2000 to the Reverb Shutdown Team that a meeting for procedure development was scheduled for February 22 noting ***"We will be developing procedures from shutting down the furnace to rebuild to start up. Please make every effort to attend."*** At that meeting, procedures to be developed were identified for many of the tasks but after a risk analysis the list was subsequently reduced.

According to Ray Gauthier's testimony, all procedures were written by the Core Team based on a risk assessment model in which bullet points were developed on how to proceed through the entire shutdown. The points were then assigned levels of risk including high, low, no risk or just normal mundane jobs. Reported injury data from the 1997 shut down reports were also used to identify areas that needed attention.

This list was then used to determine what jobs would need procedures developed, a total of 46 according to the minutes of May 3, 2000. Once a procedure was developed, it was reviewed by the Core Team. There were many other jobs and procedures to deal with as they were not just planning a wash down but an entire shutdown, rebuild and startup of the furnace plus the roasters, converter pit, anodes along with special projects and maintenance jobs.

For the reverberatory furnace, the Team had established that eye injuries from dust during the previous tear down of the bricks was the main safety concern. As a result, they agreed to develop a wash down procedure to remove that hazard.

As the Team did not have the experienced input of the Joint Health and Safety Committee or their historical knowledge, they had lost a valuable planning resource. Non shutdown incidents were not explored such as the February 28, 1996 horrific death of Richard Beasley, a crane operator in the Converter aisle and the subsequent Coroner's recommendations dealing with moisture and molten material.

At no point in the documentation or testimony is there proof that a "worst case scenario" or "catastrophic event" planning process was used. Alan Hair noted in his testimony that the company did use a more formal hazard and operability study but did not mention one for the Reverb tear down. Also, they did not ensure that the experienced Joint Safety Committee was involved in the planning. It was expected that workers and those with experience would come forward and draw their attention to details and hazards.

Most of the meeting notes and minutes from March until May suggest the meeting discussions focused on tasks, equipment and staffing needs. This does not mean that safety was not discussed, but it was not recorded in the minutes. At the various shutdown Safety Team and Core Team meetings, safety was mentioned in regards to promotion, lockout, personal protective equipment and a request for the reporting of safety concerns.

The final document from the planning stage is the Smelter Shutdown 2000 Safety Plan dated July 6, 2000, (exhibit #24 - J47). This is a listing of activities broken down into four categories. The first, **Pre Shutdown Checks** deals mainly with ensuring fire equipment checks, first aid kits and supplies, locks, permits and tags, safety related equipment on hand and contractors are supplied with personal protective equipment. The second category deals with **Promotion and Awareness** and includes a safety slogan, safety contacts and orientation material.

The third category lists the **Tasks and Responsibilities** of the safety supervisors and includes the requirement of job observation and the correction of or shutting down of unsafe work activities. Supervisors were also required to participate in accident investigations and complete a log of activities undertaken. The final category deals with **Post Shutdown** debriefing and the preparation of a report on safety related activity.

Testimony has shown that the planning was aided with a chart of critical tasks called a **Gantt Chart**, (exhibit #30). This chart outlined all the major events with time notations on when they were planned to begin and end. Following each shift, the time lines and jobs were noted as completed or adjusted to match what had actually transpired. Some testimony has referred to this chart as a sequence of specific tasks that were to be followed and some have referred to it as a work in progress. Still others felt that this was a schedule to be adhered to but it did not contain all jobs that were to be done.

The assignment of manpower requirements was detailed in a **Shut Down Assignment Sheet** (exhibit #26), that was circulated to various people just prior to the shutdown commencing. It identified shift staffing with supervisors' task responsibilities that were to be carried out during a specific time frame and named the hourly employees who would be working for them. It was coordinated with the time frame detailed in the Gantt chart which identified when the furnace was to be shut off.

### **Night shift Aug 7, 2000**

During the day shift it was observed that there was a thicker layer of material on the side walls and bottom of the furnace bath than was expected, thus delaying the furnace shut off. There were extra hourly employees working in anticipation of the start of shutdown so many of the jobs that would have been done later were done at that time. At 6:30 PM, supervisors had arrived for the turnover meetings and were being briefed on the status of the work schedule.

John Laidlaw testified that when he arrived at work the timing of the scheduled jobs had been delayed due to a change in the time of "Fire Off", the official start of the reverber shutdown. He abandoned the assignment sheet and selected his own crew to do jobs he felt could be done without following the sequence.

Testimony has been submitted that there was no rush to get the work done or start the shutdown prematurely. There was still a need for lowering of the furnace level so that equipment could be used later under the "bull nose" - an area of bricks in the arch where the flow of heat changes from horizontal to vertical. Some supervisors later felt a need to get back on the schedule and relayed that feeling to some of the workers.

At the start of shift, some supervisors conducted a general safety meeting; others conducted crew meetings and briefings of work crews. At that time fire hoses were laid out that would later be used for the wash down. The tapping of slag had been

completed and the work of cleaning the slag tapping area and the converters was underway.

At 7:30 PM, orientation and respirator fitting had begun for the workers who were there on overtime and workers who were not regularly employed in the smelter. Briefing of jobs was also carried out during this time as part of the orientation. The slag launders, cast iron chutes for removing molten material, were being demolished. An hour later, pipefitters began stripping pipes and water jackets from the outside of the furnace and shoveling had commenced on the Calcine floor to remove the larger buildup.

When the shift started on Aug 7 at 7:00 PM, the furnace was still in operation and the tapping of matte was still being done to drain the furnace of molten materials. Because the furnace would be turned off later in the shift and the material had to be removed from the furnace, the tappers were sent directly to their regular jobs and were unable to attend the safety orientation or crew meetings related to shut down.

On the tapping crew were Fred Ledoux, Steve Pickering, Tom Wolokoff and Rolly Pruden. These men finished tapping molten materials at approximately 10:45 PM just prior to the furnace shutting off and then waited in the lunch room for re-assignment to shut down tasks. They were joined by Steve Ewing and Ron Radics who had just finished their jobs on the Slag train, Ron was the driver and Steve was the brakeman. They were also waiting to be assigned to another job.

At 10:30 PM, contractors who were to knock in the walls were taken on a safety tour. At approximately 10:45 the large Brokk, a machine somewhat like a jackhammer used to knock in the wall bricks, was positioned at the south wall and created a 3 foot by 3 foot hole. After that they moved the machine to the north wall and made another hole in the wall bricks about 1/2 hour later. These holes were characterized as cooling holes in some testimony.

By 11:00 PM, the burners to the furnace were shut off and the oil lines were steamed. This was considered by many to be the unofficial start of the reverberatory furnace shutdown. At the same time, a bobcat skid steer loader began removing ash from underneath the boilers. Since this was a very dusty job, all the hourly workers were sent for their lunch break until it was completed 30 minutes later.

At 11:30 PM Kal Woods entered the lunchroom and directed the six men to break into two groups and begin washing down the dust on the top floor. The men decided to work 1/2 hour intervals and relieve each other on the hoses. Steve Ewing, Rolly Pruden and Tom Wolokoff started first. At midnight they were relieved by Fred Ledoux, Steve Pickering and Ron Radics.

At midnight, wall tiles and arch bricks were being knocked inward by some of the bricklayers and mechanics. Pipefitters were cutting pipes and water jackets. At that point a large front end loader was brought into the Converter aisle to remove some of the debris and material. As the machine's bucket barely made it through the opening,

an adjacent access door had to be locked off and the area marked with barrier tape so no one would walk into the path of the loader.

At 12:30 a.m. August 8, 2000, four supervisors, Bill Morrell, Jim Harrower, Reg Hillier and Kal Woods, held a meeting to discuss progress and next steps. They interpreted the wash down procedure to mean that they needed to add two more fire hoses and work from both ends toward the middle. This would require more workers in addition to the teams that were currently working at 1/2 hour intervals.

At 1:00 AM the contractors had returned from lunch break and were positioning the two Brokk machines (one large and one small) to begin knocking in the walls. It took them about 30 minutes to complete relocating the machines. Other mechanics and pipefitters continued stripping materials from the furnace and by 1:15 AM the two extra hoses were laid out and charged with water.

At 1:30 AM the small Brokk machine had begun to knock a hole in the north wall. Steve Ewing, Rolly Pruden and Rocky Wolokoff left the lunch room and relieved the other wash down crew. When Rolly Pruden arrived to begin hosing, Jim Harrower directed him to start at the east end of the furnace by the uptakes and Jim then left on another errand. Rolly noticed people below the area Harrower had told him to work on so he proceeded to the Y joint of the Calcine tracks. It was at this time that Steve Ewing motioned to Rolly to come over to him on the catwalk.

When Rolly joined Steve on the catwalk above the center of the furnace, Steve said Reg Hillier had directed them both to begin hosing dust off the top of the furnace. At that point the first pop sounded below them followed immediately by a larger explosion. Both men turned and began to run to escape the series of explosions that followed the first two. In the force of these explosions Rolly's glasses, respirator and helmet were torn off and he observed orange glowing material, pieces of brick and other debris flying past him and he had to cover his face for protection.

The time of these explosions was 1:45 AM and the injured workers were taken to the warehouse area to assess injuries and apply burn blankets. Once it was established that the danger had passed, ambulances began arriving to take the seriously injured to the hospital. Those who were able made their own way to the emergency room of the hospital and awaited treatment. The very seriously injured were evacuated to Winnipeg, Regina and Edmonton hospitals along with their immediate families.

### **The Internal Responsibility System**

In Manitoba, as in all other Provinces, The Workplace Safety and Health Act, is divided into two main component areas, Internal and External responsibility. We have heard varying degrees of understanding in the testimony regarding these systems and how they impact the workplace.

The internal system relies on employers establishing methods to identify hazards and implement controls providing a safe and healthy workplace for their workers. Also included is the formation of an active and informed joint workplace committee to oversee the process of hazard identification, control of hazards and implementation of training programs.

The external system relies on the enforcement of legislation and regulations by Workplace Safety and Health Division Inspectors, who investigate serious occurrences and deaths in the workplace, the failure of employers to implement the Act, respond to calls of unresolved work refusals, and make inspections of workplaces.

### **Management Loss Control System**

Most employers fulfill their responsibilities by acquiring a reliable program to aid in the management of their workplace safety and health obligations. HBMS had used a number of such programs over the years to try to reduce the number of injuries and fatalities. In August of 2000, they had been using the ***International Loss Control Institute (ILCI) Practical Leadership*** self guided program which also had an external auditing and accreditation component.

During testimony, many supervisors failed to identify the Smelter Loss Control program used to guide the management safety system. Some had some training in loss control but when exhibit 15 was shown to them, few knew of its existence at that time. Given the fact that we were reviewing it eight years following the explosion, we would not have expected all witnesses to fully recognize the document but we did expect some level of recognition or familiarity with it.

The ILCI program contained a number of elements that addressed loss to people, equipment, material and environment through management control of the work and workplace. The ILCI program is integrated within the management system and supervisory staff are required to tour their areas on a regular basis to identify changes to process, damages to equipment, and observe workers to ensure they are working safely and take steps to address deficiencies in behaviors.

### **System Failures**

Unfortunately, these two systems operate at cross purposes. Management programs support the control of injuries through management channels and generally allow for very little participation by workers. They are based on a behavioral approach to ensuring workers work safely around hazards; in other words controlling workers' behaviour to attain safety. The Internal Responsibility System (IRS) instead focuses on all workplace parties identifying and controlling hazards through engineering controls of elimination, substitution, isolation etc and attains safety through physical means such as

machine guards and automatic shut down switches and other fail safes, rather than through behaviour control.

The IRS allows the workers to participate through a joint committee made up of representatives of workers chosen by the workers and an equal number of employer representatives. The workers and management are to work co-operatively to come up with solutions to safety issues. If the Management has little or no desire to implement those recommendations, the joint committee often fails to achieve the desired resolutions.

In the explosion of August 8, 2000, the joint safety committee's agreed upon process for creating safety procedures was ignored by the Core Team. Testimony cited time as the main reason and the Joint Committee process would take too long for the high number of procedures that needed to be developed. There was an expectation that the onus was on the workers themselves to come forward should they have concerns. The implication of this is that the workers felt safe enough with the planning process, such as it was, and the unfamiliar jobs assigned to them.

### **The Right to Refuse**

Considerable testimony was focused on workers' knowledge of and familiarity with, the right to refuse. Almost every witness was asked if any worker or person had attempted to exercise that refusal on the evening and early morning of Aug 7 - 8, 2000. Managers also testified that they were aware of the legal procedures, outlined in Section 43 of the Workplace Safety and Health Act, which describes this right.

Under the Workplace Safety and Health Act, a worker must first recognize and identify a hazard that he/she has reasonable grounds to believe that the particular work is dangerous to themselves or others. The worker must report this to their immediate supervisor. If the hazard has not been fixed, or resolved in the mind of the workers, they can continue to refuse to do that part of the work that they feel is still dangerous.

If the hazard still remains unsolved, a Provincial Health and Safety Officer must be called in to investigate and make a report. This, in short, is the process that is detailed in Section 43, subsections (1) - (10) of the Workplace Safety and Health Act which was in force on Aug 8, 2000.

The problem with this approach is the worker must recognize the hazard and convince their supervisor of the danger associated with the hazard. Rolly Pruden testified regarding two previous refusals that resulted in the workers having stopped working until the safety issue was resolved.

One involved fire resistant coats suitable to prevent a death similar to that of Otto Smedegaard who died as a result of molten material setting his clothing on fire. This death occurred in December, 1996 due to an accident on November 18, 1996. The

details are in Judge Brent Stewart's report on the Inquest concluded on Jan 29, 1999 in Exhibit A binder "I".

According to Pruden, the workers at the time were tapping molten material and they believed the coat supplied was too long. Supervisors and the joint safety committee found a solution by shortening the coats and providing fire retardant aprons.

The second refusal related to an incident when a piece of the converter roof fell to the ground below. Investigation found that steel railings had also corroded and were falling on the workers. The workers exercised their right to refuse. It was two days before the hazard was resolved by replacing the loose and rusting material and cleaning off the roof.

Ray Gauthier testified that in his experience most refusals were resolved by the worker and supervisor, with perhaps one or two going to a higher level and taking longer to dispose of.

These examples show that work refusals are either solved very simply and quickly by workers and their immediate supervisors, or they can take a longer period to resolve. Either way, it is a poor way to address hazards and often fails to protect workers even when exercised; it is no substitute for a proper functioning safety and health program.

## **Training**

When management systems use a behavioral approach to safety, the training often involves awareness posters and safety talks. This was shown to be used at HBMS by testimony related to the one page **Safety Contacts**. These contacts were provided by the company safety department to be read at the crew meetings at the beginning of all shifts. After the supervisor read them out, a conversation was to ensue. The crews were to sign that they were in attendance and the contact had been read out.

The failure of this training relates to the level of understanding the worker has and how the supervisor tests that understanding. Testimony revealed that if the worker did not sign the contact, the supervisor wrote their name in for them. It is instructive to compare this safety training with the job training that HBMS provides for its employees. Under the company job training system, workers are coached, given a manual to review and then write a test related to the job. This system should be adopted by HBMS's safety program.

## **Legislative Improvements**

In 2001 following the tragic death of 16 year old Lyle Thomas in a construction accident, the Minister of Labour called for a public review of the Workplace Safety and Health Act. A committee of 4 representatives did an extensive tour of the province and submitted a

report with 62 recommendations that would change the workplace safety & health culture in Manitoba.

Many of the changes were to become law through the introduction of Bill 27 on August 8, 2002 and pertain to some of the issues and failures found during this Inquest. In particular, the effective operation of joint committees in coming up with a consensus report in a cooperative manner. Something that was not done following the explosion, the reasons for which were noted by both Mr Hair and Mr Lindsey during their testimony.

Key changes include:

- a legislated requirement to establish an Health & Safety Program in all workplaces that includes the participation of worker members
- a hazard based approach to workplace safety
- addition of supervisor responsibilities toward safety
- a requirement for competent supervision
- better training and orientation of new workers
- an increase in the number of enforcement officers.

### **Analyzing workers' rights**

The internal responsibility system is based on the principle that the responsibility for creating and maintaining a health and safety workplace falls on every person in the workplace, hence the name "internal" to the degree that they have the authority and ability to do so.

One of the cornerstones of the IRS is the right of workers to participate effectively on a joint workplace safety committee. We must consider the subordinate relationship of workers to supervisors and managers in the workplace and how this affects workers' authority to exercise those rights. We have heard testimony that many of the workers came to work on August 7, 2000 to participate in whatever work was assigned to them as needed. They placed their trust in the knowledge and experience of their supervisors to ensure their safety.

During testimony, Mr Hair described a complex and multi layered management system that had a measure of authority on all of those below as well as owing accountability and responsibility to superiors. Some managers were promoted from within HBMS existing staff and others, such as engineers, were hired directly into management.

Workers have always faced disciplinary measures in their workplaces when they are insubordinate to superiors. This relationship flavours all discussions with management levels and it takes a higher degree of confidence, knowledge and ability to contradict or challenge an authoritative manager.

Even with protections under the Workplace Safety and Health Act, this has sometimes discouraged many new workers and novice health and safety representatives from pursuing certain hazards and their solutions.

Another area that needs clarity is the role of the representative. Much confusion has arisen from the testimony of Tom Lindsey regarding his attempts to explain why he would not adopt a safety supervisor's position during the shutdown. This relates to the Act's definition of a worker representative. For the purpose of this Inquest and understanding of the issues of August 2000, we are referring to the version of the Workplace Safety and Health Act in force at that time.

Section 40(4) defines who are the Union's workplace safety and health representatives and clearly states that they *shall be persons representing workers other than workers connected with the management of the workplace and shall be appointed in accordance with the constitution of union which is the certified bargaining agent...etc....* this part needs no interpretation. However, problems occur when workers accept temporary management positions and feel they can perform both roles.

Once a supervisor has been appointed, either temporarily or on a permanent basis, they have specific duties listed in Section 4(2) that clearly show their new role and responsibilities. They must ensure that workers are acquainted with foreseeable hazards and familiar with protective equipment prior to assigning work. More importantly, they are the management contact should the worker notice a condition that presents a hazard that they feel could cause injury to themselves or others and exercise their Right to Refuse Dangerous Work under Section 43(1) - (10) of the Workplace Safety and Health Act.

There are a number of situations that do occur whereby the supervisor's role is incompatible with a representatives should they try to complete their production quotas, comply with the Workplace Safety and Health Act and attempt to represent the rights and interests of the Union members. For this reason, the Act specifically prohibits all management personnel from acting as worker representatives. It is also the integrity of Tom Lindsey that makes him accept his responsibility of a representative of workers rather than pose as a manager.

### **Possibility of a Similar Death**

Many management safety programs suggest that accidents are completely random and unforeseen events or a sequence of events that were neither predictable nor preventable. This has also been suggested in some of the expert reports presented at the Inquest. This view relies on the premise that the situation has no repeatable elements that would lead to another injury or death.

We must therefore review other instances of moisture in molten materials that have led to injury or death. The United Steel Workers Union Locals in Thompson, MB; Sudbury,

ON and Trail, BC have provided the MFL with many examples of water and moisture from faulty cooling jackets and piping that have mixed into their smelter furnaces and molten material, resulting in small scale explosions that have injured many of their members.

We have also looked at the 1996 death of Richard Beasley, Coroner's report filed in exhibit A binder "I", an overhead crane operator in the converter aisle of HBMS facility. He was loading sand flux materials into converter #1 that, unknown to anyone, contained some frozen and ice logged materials. When this deadly mixture was put into the converter, an explosion ensued that sprayed the cab Richard was in with a significant amount of molten material.

His incinerated body was recovered and the Coroner found the cause to be **introduction of foreign substances eg. moisture into molten matter**. He further ruled that a jury of six lay people could not improve upon or make additional constructive recommendations to prevent similar occurrences in the future. A haunting decision to this Inquest.

We have also looked at the death of Jim Nicholson, a Canadian Autoworkers Union member working at Griffin Steel in Winnipeg. On December 19, 2005 Jim was checking the condition of the bath in their Electric Arc Furnace by opening a working door for a visual inspection. He noted that there was a bridge of scrap steel that had tangled to the point that it was not submerging into the molten metal bath.

The company procedure was to use a forklift with a ram device mounted on the forks to push the steel over into the bath. As the **cold materials contacted the molten materials, an explosion occurred** that engulfed Jim and the forklift. Most of Jim's body was burnt to a significant degree and he died of his severe injuries in hospital on January 27, 2006.

When we include the death of Steven Ewing in the count, there have been 3 Manitoba workers killed within 10 years as a result of molten material explosions in their workplace.

### **Establishing a Safety Culture: MFL Recommendations**

In order to address the failures of the legal and management systems that should have protected the workers at HBMS, we feel that the Government must evaluate and adjust the internal responsibility system. Three deaths from explosions of molten material on three different occasions are proof that Steve Ewing's death was neither random nor unforeseeable.

We therefore make the following 12 recommendations to prevent a reoccurrence of this catastrophic event.

1. Right to participate reinforced

Even with the changes made in 2002 to improve the response of the employer to Joint Committee recommendations the committee is still not empowered to make specific changes when the risk to workers is great. There needs to be better authority for the committee to implement their recommendations when death or serious injury would be the result.

2. Right to refuse made simpler

Work refusals only work when the worker recognizes the hazard and is able to convince their supervisor that it needs to be addressed. If either person fails to properly recognize the situation as hazardous, delays or injuries result. Work refusals should be a last line of defense for a worker, not a substitute for a properly functioning program.

3. Act administered to protect from catastrophic events

The Workplace Safety and Health Division, Manitoba Department of Labour, should have greater authority, resources and direction to do more preventative work with employers, joint committees and workplaces. Their role as "after the fact" investigators does little to protect workers and consumes too much staff time that would be better utilized in prevention of catastrophic events.

4. Hazard based approach NOT risk management

The Act must specify that the first approach to a hazard is to remove or minimize its impact from the workplace and on workers. It is much better to "injury proof" a workplace than train workers to tip toe around hazards. Risk management is an assessment done by persons who are rarely at any personal risk of injury and yet they determine what injuries, illnesses and possible deaths are acceptable for someone else.

5. More individual management responsibility in Act

Workplaces have multiple layers of management personnel who exercise authority over workers. Currently only supervisors are held accountable for worker safety by the Workplace Safety and Health Act. Section 4.1 of the current Act must be amended to include all managers that plan work and direct workers so that hazards are assessed and addressed.

6. Define competent supervision

Supervisors and managers who are directing workers must have topical knowledge of the hazards that would be encountered by the workers. They must possess such

industry experience and knowledge to be able to ensure that they are aware of the regular and unforeseen hazards associated with the work being performed.

#### 7. Training on hazard recognition

All managers, supervisors and workers must be included in hazard recognition training that is relevant to the work they are performing. Annual half day sessions must be dedicated to this training and full days in higher hazard industries. Job briefings on hazards in the work area must be included.

#### 8. Mandatory Joint committee training

There is a requirement in the Act that allows for members of the Joint committee to take 2 days for educational purposes. There must also be a further requirement to add one more day to include the whole committee in mandatory joint training over and above these 2 days. This allows for common ground training as well as specialty training gained during the 2 day leave.

#### 9. Training - comprehension & proficiency

All training must contain a mandatory component that tests and evaluates understanding of the information and the ability to correctly apply the principles they contain. Workers expected to do work that is out of their normal work skills must be able to demonstrate their ability to recognize potential hazards that they may be faced with.

#### 10. Increase fines to act as deterrent

The current Federal fine for infractions of workplace safety and health laws is one million dollars (\$1,000,000.00). Though this fine has never been levied it is a strong deterrent to scofflaws and encourages adherence to responsibilities. The Manitoba Government needs to show dedication to the value of safer and healthier workplaces and their workers by increasing the levels of fines to a maximum that reflects their commitment.

#### 11. Reinforce 2002 Changes

Changes that were made in 2002 to the Workplace S&H Act need to be noted and reinforced rather than silent acknowledgement. Such changes are related to co-operative joint committee operation and worker participation, right to refuse dangerous work, establishing a comprehensive program that takes a hazard based approach and better training and orientation of new or re-assigned workers.

## 12. Mandatory Inquests for workplace deaths.

The main purpose of an Inquest is in harmony with any prevention strategy, to recommend steps necessary to prevent similar deaths from occurring in other industries. Inquests are a more thorough form of investigation and should form a part of the External Responsibility system and be held whenever a work related death occurs as a result of a worker performing their workplace responsibilities to determine lessons learned and help prevent a similar death.

### **Conclusion**

Every year on April 28, the National Day of Mourning, the workers in Manitoba hold services of remembrance for workers who have been killed, disabled or made sick by their jobs. Manitoba's average number of workplace deaths per year is 34 over the last 10 years. In 2007, we mourned the loss of 40 workers who died as a result of their workplace. In Canada, the national average of workplace deaths is 926. On average, 18,000 Manitoba workers have to miss time at work due to workplace injuries.

Almost all the tragic workplace deaths in the last 10 years have been both senseless and meaningless. Senseless, because each one was preventable. Meaningless because each one provided no lesson on how to prevent a similar death in other workplaces.

An exception has been the death of Steve Ewing and the resulting Inquiry and what we have learned. It is too late for Jim Nicholson but had an Inquest been called following the death of Richard Beasley, both Steve and Jim could be alive today.

It is the hope of the MFL and our 96,000 members that recommendations go forward to Government and the much needed improvements are made to the Internal Responsibility System by changes to the Workplace Safety and Health Act. We need changes that will allow workers real and meaningful input into the prevention of death and injury. We need changes that will stop the carnage.

Workers deserve no less.