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**Update from CNSC Staff**

**Mise à jour du personnel  
de la CCSN**

**Update on Mississauga Metals  
& Alloys Inc.**

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**Mise à jour au sujet de Mississauga  
Metals & Alloys Inc.**

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Commission Meeting

Réunion de la Commission

**November 5, 2020**

**Le 5 novembre 2020**



To Marc Leblanc  
Commission Secretary

c.c.: Ramzi Jammal, EVP ROB  
Stephane Cyr, CFO

A

From Kavita Murthy  
Director General  
Directorate of Nuclear Fuel Cycle and Facilities  
Regulation

De

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Subject Update from CNSC staff on Mississauga Metals and Alloys  
Objet

**Introduction**

Mississauga Metals and Alloys (MM&A) holds a Waste Nuclear Substance Licence (WNSL), WNSL-W2-3750.0/2021, issued by a CNSC designated officer (DO) for the management and storage of nuclear substance waste at its site in Brantford, Ontario. The first WNSL licence to MM&A was issued in 2007. Previous to that, from 1998 to 2007, MM&A operated under nuclear substance licences.

In April 2019, the Commission, under powers granted to it under Section 7 of the *Nuclear Safety and Control Act* (NSCA), issued an exemption to from the application of paragraph 24(2)(c) of the NSCA and Part 2 of the *Cost Recovery Fees Regulations* in respect of the requirement for MM&A to be in good financial standing at the time of licensing. The exemption allowed a licensing decision to be made by the DO for the MM&A licence that was expiring April 30, 2019. It did not exempt MM&A from paying its fees.

In the Record of Decision (ROD) [1], the Commission directed staff to take specific actions and through this memo we are providing an update to the Commission on those actions. This memo also provides an update on additional matters of relevance to the Commission, given the impending expiry of MM&A’s licence on April 30, 2021. No action or decision is being requested of the Commission associated with this update.

**Background**

MM&A is a metal recycling facility located in Brantford, Ontario. Prior to 2007, MM&A imported zirconium metals, tubes and alloys that were contaminated with natural or slightly enriched (<5%) uranium for decontamination. The decontamination process resulted in the accumulation of a large inventory of

uranium-contaminated metals and acids at the facility. MM&A currently has 18 intermodal containers on site in Brantford, Ontario that store its contaminated waste inventory.

Since 2007, following an Order issued by the CNSC, MM&A has not performed metal decontamination as part of its commercial business operations. A CNSC licence continues to be required for the management of accumulated contaminated wastes from past activities. Since 2002 MM&A's focus has been on the cleanup and removal of the accumulated waste from the site, which would remove the need for MM&A to continue holding a CNSC licence.

### **Operations Update**

In 2017, MM&A's warehouse was destroyed by a fire [2], which has resulted in a prolonged period of significantly reduced commercial operations. MM&A continues to be in the process of rebuilding, and had resumed approximately 40% of its conventional metal recycling operations prior to onset of the COVID-19 pandemic. Operations were impacted again this year as a consequence of the pandemic's effects on the manufacturing sector which reduced the supply and demand for MM&A's recycled metals. In September 2020, MM&A reported that operations had resumed to its pre-pandemic levels of 40% capacity.

MM&A recently indicated that the post-fire reconstruction will be resuming this November, and is expected to be completed in June, 2021, after which it could resume full operation [3].

### **Update Regarding Record of Decision paragraph 18 – Designated Officer report to Commission**

In paragraph 18 of the Record of Decision [1], the Commission directed the DO to report to the Commission regarding the decision taken on MM&A's licence application and associated RAP fee payment plan, in the context of the relevant Regulatory Oversight Report (ROR) [1]. In lieu of reporting to the Commission in the 2019 ROR, and to provide the Commission a dedicated and more detailed update, CNSC staff are providing this separate memo to the Commission.

The DO made the decision to issue a 2-year licence to MM&A on May 1, 2019 [4]. This licence included a licence condition (11.2) that required MM&A to follow a payment plan that was proposed by the licensee and accepted by CNSC staff. The intent of the 2-year licence period was to authorize MM&A to continue to possess and store its radioactive waste while developing a plan for the complete removal of the waste from the site. Waste removal activities were expected to be performed under the next CNSC licence (2021), for which the authorized licensed activities and term would be supported by a detailed inventory removal plan and other relevant programs.

### **Update Regarding Record of Decision, paragraph 12, 14, and 18 – Financial Arrears**

As mentioned above, MM&A has been in the process of reconstructing its site since the 2017 fire. This prolonged period of reduced operation has also had a financial impact. At the time of its licence expiry on April 30, 2019, MM&A had an outstanding balance of its RAP fees in the amount of \$38,238. Following the Commission exemption, and in consideration of ROD [1] par. 12 and 14, the DO made the decision to issue a 2-year licence [4], and included a licence condition 11.2 which states: which states *“The licensee shall comply with the arrears payment schedule as set out in Appendix A of this licence, and with the requirements of the CNSC Cost Recovery Fees Regulations for CNSC fiscal year 2019-2020 forward.”*

The payment schedule was proposed by MM&A and accepted by CNSC staff in regulatory operations and finance. It consisted of three monthly payments of \$12,746 each, and was intended to alleviate some of the financial burden associated with an immediate lump sum payment for the full amount. MM&A provided the

first payment on May 07, 2019, as committed. The second payment, due June 07, 2019, was made on June 17, 2019 following a letter sent on June 10, 2019, by the Director of the Nuclear Processing Facilities Division. The third payment, due July 08, 2019, remains outstanding. In addition to not providing the final payment from its 2018-2019 RAP fees in arrears, MM&A has not paid its licensing fees for the current licence period. MM&A is therefore in contravention with condition 11.2 of its licence [4] and with the *Cost Recovery Fees Regulations*.

In an attempt to resolve the outstanding balance, in November 2019, CNSC staff and MM&A agreed to establish a second payment plan, which comprised monthly payments until December 2020 that would have resulted in payment of all outstanding arrears as of that date. MM&A provided the first payment of \$3,000 on November 8, 2019 but has not made any other payments to the plan since, despite repeated reminders by CNSC staff.

On January 20, 2020, following unsuccessful attempts to reach MM&A and further to the non-respect of the payment plan in place, CNSC staff submitted the file to the Canada Revenue Agency (CRA). Under the CRA Business Refund Set-off Program, any refunds to be issued to MM&A, such as tax or GST/HST refunds, will instead be directed to CNSC. To date, no payments have been received by CRA as a result of this program.

As of September 30, 2020, the total outstanding balance for MM&A's RAP fees was \$141,488.78. Additional fees for 2020-21 (Q3 and Q4) are due in November 2020 and February 2021 in the amount of \$32,300 per payment.

#### **Update Regarding Record of Decision, paragraph 14 - Compliance Verification**

Prior to the issuance of the current licence, CNSC staff discussed the contents of the licence and licence condition handbook with MM&A [5] to ensure that the licensee had a thorough understanding of its obligations. Given the arrears in payments, and over concerns about the potential impact on safety, CNSC staff have continuously augmented compliance oversight of MM&A. This augmentation was reflected in the activities included in the annual RAP. On November 25-26, 2019, CNSC inspectors conducted an inspection of the MM&A site which resulted in the issuance of an Order (discussed below).

CNSC staff have been in frequent contact with MM&A, by telephone, teleconferences and email exchanges to discuss submissions and to obtain updates on the financial situation. CNSC staff meetings with the licensee included topics on waste characterization, the Radiation Safety Manual, updates from the licensee on its plan to remove the waste, investigation into possible waste removal options, etc. Despite CNSC staff efforts, MM&A is often remiss in meeting its deadlines for document submission and, as discussed in the above section, has not met its financial obligations. As mentioned in the previous section, MM&A only submitted a payment of the second installment on June 17<sup>th</sup>, 2019 after receiving a letter from the Director of the Nuclear Processing Facilities Division

The activities authorized under the current CNSC licence are considered a low risk activity, and the environment, health and safety of persons remains protected while the inventory is in storage. This has been confirmed through inspections. However, given the continued failure of MM&A to honour its commitments and address the non-compliances, CNSC staff have considered further escalation of enforcement actions, that include but are not limited to issuing an inspector Order to MM&A to dispose of the material itself or through a contract to a qualified third party, or by CNSC undertaking to have the material removed from the site and recovering the full costs from MM&A.

## **Order to MM&A**

MM&A's licence, WNSL-W2-3750.0/2021, contains a hold point<sup>1</sup> under Licence condition 4.1. At this time, MMA is only authorized to possess and store the nuclear substances. MM&A must submit a revised radiation protection program for CNSC acceptance in order to conduct any other activities. This hold point remains in effect, since MM&A has not submitted an acceptable radiation protection program.

On November 25-26, 2019 CNSC staff conducted an inspection at the MM&A facility. During the inspection it was noted that MM&A staff had been moving and consolidating contaminated acid totes in an effort to create more room for ongoing building construction. As mentioned in the previous paragraph, MM&A is not authorized to move or handle nuclear substances, and therefore an Order was issued to MM&A on December 6, 2019 by the CNSC inspector [6]. The Order required MM&A to cease these activities until a revised radiation protection program is submitted to CNSC for its acceptance and MM&A demonstrates the necessary qualifications to implement the radiation protection program.

MM&A can only resume the consolidation of acid wastes after it has implemented an acceptable radiation protection program as stated in the Order. MM&A has stated in recent correspondence [3] that it intends to complete the radiation protection program revisions by November 30, 2020.

## **Site Clean-Up Planning**

It should be noted that the possession and storage of the MM&A waste inventory, as authorized under the current CNSC licence is considered a low risk activity, and the environment, health and safety of persons remains protected.

At the time of the application for the 2019 licence renewal, MM&A was exploring various options for disposing of its radioactive waste inventory. Waste removal activities were expected to be performed under the next CNSC licence (2021), for which the authorized licensed activities and term would be supported by a detailed inventory removal plan and all other applicable regulatory program documents.

On October 5, 2020 upon CNSC staff's request, MM&A provided a high-level overview [3] of its proposed clean up plan for the site, which estimates the full clean-up and removal of waste from the site would be completed by March 2024. MM&A committed to providing a detailed site clean-up plan before January 31, 2021 for CNSC staff review and acceptance. In order to carry out a full clean-up in a cost effective manner, MM&A has indicated that the contaminated acid inventory should be neutralized and processed to create a contaminated solid product that can be transported to a licensed facility for disposal. The processing of contaminated acids is considered to be an activity which requires additional radiation protection control measures beyond those needed for possession and storage. MM&A will have to request the authorization for these activities and provide supporting documents for CNSC staff review and acceptance as part of its application package.

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<sup>1</sup> Licence Condition 4.1 The licensee shall implement and maintain a radiation protection program which includes a set of action levels, and shall not carry out activities referred to in paragraph (a) of Part IV of this licence, with the exception of possessing and storing nuclear substances until a revised Radiation Protection Program is received and considered acceptable to the Commission.

## **Financial Guarantee**

During the 2019 licence renewal, MM&A increased its financial guarantee from \$25,500 to \$200,000, which is the maximum amount MM&A indicated it was able to secure. Although it represents a substantial increase from its previous financial guarantee, based on a preliminary discussions with MM&A and general knowledge of the costs of decommissioning nuclear sites, CNSC staff is of the opinion that the amount of \$200,000 may be insufficient to fund a complete clean-up of the site, including the removal of all contaminated wastes.

The costs associated with disposing of the current inventory of contaminated acids will account for the largest share of the clean-up expenses. MM&A has explored the option of disposing of the waste in its current form and determined it to be prohibitively expensive. Processing the liquid waste into solid form would significantly reduce the cost of disposal. MM&A had successfully processed some of the acid waste inventory prior to the 2017 fire. Prior to removing the waste from site, MM&A will need to provide a detailed, decommissioning plan. Until this is done, the cost of waste removal can not be reliably estimated.

## **Next steps**

In September 2020, CNSC staff requested MM&A to provide a plan to dispose of its radioactive waste and to resolve its non-compliances (i.e., payment of outstanding RAP fees, addressing radiation protection program deficiencies, and addressing the Order). MM&A provided an overview of its plan on October 5, 2020 [3] in which MM&A commits to update the radiation protection program by November 30, 2020. The overview also indicates MM&A's plan to start the clean-up work in June 2021. MM&A's licence expires on April 30, 2021, so a new licence will be required to conduct the activities in June, 2021. MM&A will need to apply for the new licence no later than January 31, 2021, to allow sufficient time for CNSC staff to assess the application and submit recommendations to the DO.

With regards to the RAP fees owed, MM&A proposed a payment plan [7] consisting of monthly payments of RAP fees in arrears over a 3-year period. These payments would have to be made in addition to the RAP payments due November 2020 and February 2021. Since the current licence expires on April 30, 2021, the proposed plan would result in an outstanding balance at the time of licence expiry. On October 21, 2020, CNSC staff informed MM&A that they cannot accept the proposed payment plan [8] as staff do not have the authority to grant deferrals of RAP fee payments beyond the current licence term. In its response [9], MM&A confirmed that it will not be able to pay all fees by the time of licence renewal in April 2021. Given this confirmation, a second exemption, similar to the previous one in 2019, will be required from the Commission in order for the DO to make a licensing decision. Should it apply for a licence renewal, MM&A will have to also submit a request to the Commission to be exempted from these requirements at the same time (January 31, 2021). CNSC staff will review all the facts, when determining whether to recommend the exemption to the Commission no later than February 26, 2021.

Through this memo, staff are not requesting a decision from the Commission regarding this licensee. Staff's next update to the Commission regarding this licensee will be in February, or sooner if the Commission so instructs. In its update, CNSC staff will provide the progress made by the licensee and the next steps in CNSC's enforcement plans.

## References

1. Record of Decision, Exemption under Section 7 of the NSCA from paragraph 24(2)(c) of the NSCA and Part 2 of the CRFR, April 30, 2019, e-Doc 5890171
2. Memorandum from H. Tadros to M. Leblanc, CNSC staff update on the fire at Mississauga Metals and Alloys Inc. licensed location February 3, 2017. April 11, 2017 e-Doc 5226517
3. Email from D. Sharpe to P. Tanguay, Re. Trailers, October 5, 2020, MM&A Decommissioning Plan Overview, e-Doc 6396539
4. Waste Nuclear Substance Licence, Mississauga Metals & Alloys Inc. Waste Management Facility, WNSL-W2-3750.00/2021, e-Doc 5889305
5. Email from G. Smith to D. Sharpe. Subject: For your review: draft MM&A licence and licence conditions handbook. April, 11, 2019. e-Doc 6406340.
6. Order under Section 35 or Paragraph 37(2)(f) of the NSCA, e-Doc 6062675
7. Email from S. Sharpe to O. Dolghi. Re: CNSC arrears, October 5, e-Doc 6406686
8. Email from O. Dolghi to S. Sharpe. Re: CNSC arrears, October 21, e-Doc 6404795
9. Email from S. Sharpe to O. Dolghi. Re: CNSC arrears, October 21, e-Doc 6405914