

Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant Zircatec Precision Industries Inc.

Subject Application to Renew the Class IB Nuclear Fuel
Facility Operating Licence for the Nuclear Fuel
Bundle Fabricating Facility located in Port Hope,
Ontario

Hearing
Dates October 4 and November 30, 2006

Intervenors	Document Number
See appendix A	
Others	
<ul style="list-style-type: none"> • Ministry of the Environment, M. Lange, M. Dickson, M. Longpre • Ganaraska Conservation Authority, M. Peacock • HRSDC Labour Program, B. Tomlin • Fire Chief of Port Hope, Chief Haylow 	

Licence: Renewed
Date of Decision: November 30, 2006

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Introduction

1. Zircatec Precision Industries Inc. (Zircatec) has applied to the Canadian Nuclear Safety Commission (CNSC¹) for the renewal of the Class IB Nuclear Fuel Facility Operating Licence for its facility in Port Hope, Ontario. The current operating licence no. FFOL-3641.0/2007 expires on February 28, 2007. Zircatec has applied for a five-year term, with specific changes to certain conditions of the existing licence.
2. Effective February 1, 2006, Cameco Corporation acquired 100% ownership of Zircatec. This change in ownership did not affect Zircatec's legal identity as a valid CNSC licensee.
3. Zircatec is currently licensed to produce up to 125 Megagrams (Mg) per month of uranium dioxide (UO₂) as pellets contained in all types of nuclear fuel bundles for CANDU and research reactors. The facility manufactures three types of nuclear reactor fuel bundles: one, using natural uranium containing about 0.7% U-235; the second, using depleted uranium, containing about 0.3% U-235; and the third, using enriched uranium (sometimes called Slightly Enriched Uranium or SEU) containing 0.7% to less than 5.0% U-235.
4. Zircatec had originally applied, as part of its licence renewal application, for the authorization to establish a new fuel production line to produce an enriched fuel product (CANDU CANFLEX Fuel Bundle) containing approximately 1% U-235 enrichment. CNSC staff determined that an environmental assessment was required before the Commission could consider this application. Thus, Zircatec's proposed project to establish a new fuel production line at the facility is not included as part of the Commission's consideration for this licence renewal hearing.

Issue

5. In considering the application, the Commission was required to decide, pursuant to subsection 24(4) of the *Nuclear Safety and Control Act*²:
 - a) if Zircatec is qualified to carry on the activity that the licence would authorize; and
 - b) if, in carrying on that activity, Zircatec would make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

¹ In this *Record of Proceedings*, the *Canadian Nuclear Safety Commission* is referred to as the "CNSC" when referring to the organization and its staff in general, and as the "Commission" when referring to the tribunal component.

² S.C. 1997, c. 9.

Public Hearing

6. The Commission, in making its decision, considered information presented for a public hearing held on October 4, 2006 in Ottawa, Ontario and November 30, 2006 in Port Hope, Ontario. The public hearing was conducted in accordance with the *Canadian Nuclear Safety Commission Rules of Procedure*³. During the public hearing, the Commission received written submissions and heard oral presentations from CNSC staff (CMD 06-H19 and CMD 06-H19.A) and Zircatec (CMD 06-H19.1, CMD 06-H19.1A and CMD 06-H19.1B). The Commission also considered oral and written submissions from 124 intervenors (see Appendix A for a detailed list of interventions).
7. The Commission also held a public hearing on Cameco Corporation's application to renew the operating licence for its facility located in the Municipality of Port Hope. Because the two facilities are located in the same geographic area, and recognizing the interest many of the intervenors have in both facilities, the Commission considered for both hearings any relevant information presented on either hearing record.

Decision

8. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Proceedings*, the Commission concludes that Zircatec is qualified to carry on the activity that the licence will authorize. The Commission is also satisfied that Zircatec, in carrying on that activity, will make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed. Therefore,

the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, renews the Nuclear Fuel Facility Operating Licence for Zircatec's nuclear fuel bundle fabricating facility located in the Municipality of Port Hope, Ontario. The licence, No. FFOL-3641.0/2012, is valid from March 1, 2007 until February 29, 2012.

9. The Commission includes in the licence the conditions recommended by CNSC staff, as set out in the draft licence attached to CMD 06-H19 and CMD 06-H19.B.
10. With this decision, the Commission requests that CNSC staff present a status report to the Commission on the performance of the facility during the first half of the licence term. The status report will be presented at a public proceeding of the Commission as soon as practical after the mid-point of the licence term.

³ S.O.R./2000-211.

Issues and Commission Findings

11. In making its licensing decision under section 24 of the NSCA, the Commission considered a number of issues relating to Zircatec's qualifications to carry on the proposed activities, and the adequacy of the proposed measures for protecting the environment, the health and safety of persons, national security and international obligations to which Canada has agreed.
12. The findings of the Commission presented below are based on the Commission's consideration of all of the information and submissions available for reference on the record for the hearing. The Commission notes that several intervenors' concerns were discussed in detail during the course of the hearing, and that this information can be found in the transcripts of the proceedings.

Radiation Protection

13. The Commission considered information on the past performance at the Zircatec facility to assess whether the licensee has demonstrated its ability to adequately provide for the protection of workers, the public and the environment from radiation.

Protection of Workers from Radiation

14. Zircatec submitted that it has a comprehensive Radiation Protection Program that details the responsibility for providing a workplace environment that protects employees, visitors, and contractors from exposure to radiation and radioactive materials. Zircatec stated that the ALARA (As Low As Reasonably Achievable) principle forms the basis for much of Zircatec's Radiation Protection Program and is integrated into each of Zircatec's radiation safety procedures. Zircatec also noted that Action Levels are in place as a method of operational control to assist in the early indication of potential loss of control of its Radiation Protection Program. Zircatec stated that it operates well below the regulatory limits as set in the *Radiation Protection Regulations*⁴ (2001) and, during the current licence period, no individual exceeded these limits.
15. As part of its commitment to continuous improvement, Zircatec noted that it upgrades and maintains state of the art equipment and capability in the area of radiation protection. As an example of this effort, Zircatec has installed more sensitive portal monitors and hand and foot monitors to further reduce the possibility of contamination being transferred within the facility or outside the facility.
16. CNSC staff reported that Zircatec's Radiation Protection Program and its implementation meet requirements and is effective in protecting its workers. CNSC

⁴ S.O.R./2000-203.

staff concurred with the licensee that doses to employees at the facility remain below regulatory limits, noting a general decreasing trend in effective doses received during the licence period. CNSC staff also noted that Zircatec has established revised acceptable Action Levels that are designed to give an early warning to the licensee and the CNSC of a potential loss of control of a process and take corrective actions to bring the process under control. CNSC staff noted that these action levels were exceeded once during the licence period, due to the misplacement of dosimeter badges. CNSC staff recommended a licence condition to be added to clarify the reporting requirement with respect to Action Level exceedance, pursuant to the *Radiation Protection Regulations*.

17. CNSC staff also noted the improvements made by Zircatec during the current licence period, including the addition of a portable decontamination unit to be used during emergency fire response for employees.
18. Concerned that skin doses to the workers appeared to have increased although overall extremity doses have decreased, the Commission enquired whether this was an indication of a possible breakdown in protection measures. Zircatec explained that the increase in skin doses were attributed to fluctuations in production levels while extremity doses had decreased as a result of increased protective measures. CNSC staff noted that all doses remained very low and below Action Levels. The Commission then enquired if there had been excessive overtime during the licence period that may have contributed to the increased doses. Zircatec acknowledged that overtime had been an issue, but that it was currently being addressed by hiring additional workers.
19. With the view to ensure worker protection, the Commission sought further information regarding the sampling procedures and specifically asked whether lung counting was required. Zircatec provided information regarding the types and frequencies of the samplings and stated that monitoring exposure to uranium dioxide, the radioactive substance of concern at the facility, does not require lung counting. CNSC staff concurred that lung counting was not required.
20. The United Steelworkers, Local 14193 provided information regarding the work done by the joint ALARA committee in establishing a safe culture for the workers and the environment.
21. An intervenor noted that, as a licensed physician and a consultant for Zircatec, he conducts regular medical examinations onsite at the Zircatec facility. He expressed the view that Zircatec is a leader in health and safety based on the high quality of its medical surveillance program, its focus on medical and general health education, and the continuous support for its emergency medical and emergency response team. He also submitted that workers have not expressed major concerns regarding the workplace.
22. An intervenor submitted that his health had seriously deteriorated due to prolonged radiation overdose and to exposure to a particulate radioactive material - beryllium -

when he was a worker at this facility. The intervenor further noted the difficulty experienced in trying to access his dose records.

23. In response to the Commission's request for further information regarding this intervenor's submission, CNSC staff explained that it had provided the intervenor with the available information for the requested period. CNSC staff also noted that the intervenor's claims were an occupational health matter that was outside of the CNSC mandate. The Commission expressed the need for clarity regarding the roles and responsibilities of the responsible authorities and with respect to access to personal health data. In this regard, CNSC staff explained the role of the National Dose Registry (NDR), a centralized radiation dose record system operated by the Radiation Protection Bureau of Health Canada. CNSC staff further stated that it relies on the NDR and that, in its opinion, the data collected is of the highest quality. CNSC staff also noted that it had provided to the intervenor the information available as part of the regulatory oversight program, such as compliance and annual reports. Zircatec submitted that health data and records are available and requests for information are addressed.
24. The Commission notes that, as expressed following this intervenor's submission at the mid-term performance hearing⁵ held on February 23, 2005, it has no evidence to link the intervenor's illness to the past operation of the Zircatec facility. However, the Commission is of the opinion that improved communication on the roles and responsibilities of the CNSC, the NDR and the licensee and with respect to access to information would benefit both past and current workers. Thus the Commission expects that the relevant organizations ensure that acceptable policies and procedures are in place and are diligently followed regarding the access to and quality of workers' health data.

Protection of the Public from Radiation

25. Zircatec submitted that its performance in protecting the public from radiation has remained acceptable and well below the regulatory individual effective dose limit of 1 millisievert per year (mSv/yr). During the period from 2002 to 2004, the annual public dose was calculated using emissions to air and emissions to sewer in a worse case scenario model (i.e., a person living at the fence line 365 days per year, breathing perimeter air and drinking sewer water at recommended potable water consumption rates). Zircatec noted that this method of calculation was changed in 2004 to use a Derived Release Limit (DRL) for dose rate to the public and which included gamma exposure information, leading to a more complete model of calculating. The gamma dose rate for 2002 to 2006, taking into account the background levels and conversion from ambient to effective dose, as well as exposure to air emissions from exhaust and stack sources, indicate that the public dose remained well below the regulatory limit. Zircatec also stated that neutron detectors exposed around the perimeter of the facility indicate that neutron exposure is undetectable.

⁵ Refer to the Record of Proceedings on Zircatec Precision Industries Inc.: *the Mid-term Performance Report on the Operation of the Port Hope Fuel Fabrication Facility*, published May 18, 2005.

26. Zircatec reported that, as part of its ALARA program and its efforts to ensure little to no environmental impact from its operation, it had installed an engineered shield on the west side of its Fuel Storage Building. This shield reduced the exposure levels at the monitoring location for the critical receptor to background levels.
27. Through its review of the licensee's records during quarterly inspections, CNSC staff confirmed that doses to the public have remained well below the regulatory limit during the current licence period. CNSC staff reported that the total annual dose to a member of the public residing nearest to the facility was estimated to be 0.116 mSv during 2005 and 0.001 mSv during the first half of 2006. CNSC staff concluded that the radiological risk to the public has been low and the overall performance of Zircatec in this safety area meets requirements.
28. A number of intervenors expressed their concern regarding the health effects of radiation exposure, the validity of the regulatory limit set for the public and the need for further health studies on the population of Port Hope. Specifically, there was concern regarding the possible effects of low ionizing radiation on genetics, citing material from various sources, including the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) and the United States Environmental Protection Agency. It was also submitted that the results of the existing health studies indicate there could be possible disease trends that warrant further investigation.
29. In response to these intervenors' concerns and at the request of the Commission who sought further information regarding health effects of radiation exposure on this community, CNSC staff provided details of the cancer incidents and the cancer mortality reports conducted by Health Canada with the participation of national disease surveillance experts. CNSC staff explained the independent peer review process performed with the objective of validating these studies, listing the Canadian and international experts who participated in the reviews and which included the current UNSCEAR consultant on radon. CNSC staff also noted the importance of considering statistical significance when interpreting the available data collected over the years. CNSC staff reported that the Cancer and General Mortality Report, covering the period between 1956 and 1997, indicates that congenital abnormalities in the community of Port Hope were less than what would normally be expected in a similar town in Ontario. CNSC staff further noted that childhood cancers within Port Hope were well within the range of what would normally be expected.

Conclusion on Radiation Protection

30. Based on the information received, the Commission is satisfied with Zircatec's regulatory performance in the area of radiation protection. The Commission is of the opinion that Zircatec has made, and will continue to make adequate provisions for the protection of its workers and the public from the effects of radiation.

31. The Commission is also of the opinion that the projected risk that the facility poses to the health of Port Hope residents has been adequately assessed using current scientific information. The Commission notes that it is satisfied with the CNSC staff's reviews of the work and recommendations of relevant technical committees and its uses of the best available environmental science in carrying out its regulatory activities, including the assessment of the effects of radiation exposure.
32. Furthermore, the Commission notes that it is satisfied with the adequacy of the health studies carried out to date and is of the opinion that the results of these studies provide further evidence that the continued operation of the facility will not pose an unreasonable health risk to the population of Port Hope.
33. With respect to the submissions regarding the need for further health studies, the Commission notes that similar submissions were considered at the mid-term performance hearing held on February 23, 2005. The Commission notes, as it did then, CNSC's past participation in these types of health studies. The Commission further notes that CNSC staff stated it is not planning any further general health effects studies, that health is under provincial jurisdiction and that CNSC staff would consider participating in studies initiated by others on a case-by-case basis.

Environmental Protection

34. To ensure protection of the environment, Zircatec stated that it has established a comprehensive Environmental Protection Program that consists of pollution source abatement and monitoring. Zircatec provided details of its monitoring plan for particulate atmospheric effluent, liquid effluent, perimeter gamma radiation, soil and vegetation, and groundwater.
35. Zircatec also provided information on a recently completed Ecological Risk Assessment (ERA) for the facility. The ERA concluded that water and air of non-radiological emissions from the facility's routine operations presented no appreciable risk to the environment and that radiological emissions released during routine operations through airborne or water effluent did not pose a significant risk to the environment. The ERA recommended that the monitoring program for measuring uranium emissions to water and air as well as soil should continue for trending purposes.
36. CNSC staff stated that Zircatec's Environmental Protection Program and its implementation meet requirements. CNSC staff submitted that Zircatec adequately controls its releases of uranium at the source; monitors the impact on the environment; manages hazardous wastes and keeps doses to the public ALARA. CNSC staff reported that measured levels of uranium in air emission and liquid effluent are well below the derived release limits (DRL) calculated levels or Action Levels, as applicable. CNSC staff noted that the maximum concentration of uranium in ambient air is less than 0.001

microgram per cubic meter ($\mu\text{g}/\text{m}^3$), much less than the proposed Ontario Ministry of the Environment limit of $0.48 \mu\text{g}/\text{m}^3$. CNSC staff also noted the several improvements made by Zircatec during the current licence period to enhance its environmental protection program.

Environmental Monitoring

37. Regarding uranium accumulation in soil, Zircatec reported that soil and vegetation samples are collected and analyzed from 18 specific locations surrounding the facility (within the plant boundaries, as well as outside). During the licence period, the results from each location were well below the 300 parts per million (ppm) guideline set by the Ontario Ministry of the Environment and the draft guidelines from the Canadian Council of Ministers of the Environment (CCME). In addition, results indicate there are no increasing trends of uranium accumulation in soil with a few locations showing a decreasing trend.
38. Noting that highest values of uranium were found near the edge of the property on which is located the facility, the Commission questioned whether there was adequate sampling of the soil to demonstrate that there are not significantly higher emissions further off the property. CNSC staff responded that the locations of the soil sampling areas are based on the air dispersion modelling and the predictions of where the maximum concentrations are likely to be observed. CNSC staff submitted that the ERA conducted by Zircatec confirmed that the monitoring locations were in areas where the highest deposition rates were expected and that the levels observed are well below established guidelines. CNSC staff also noted that, based on the results of the CCME's initiative to revise uranium guidelines, it will revise the tracking of information being generated by the soil programs for all licensees, including Zircatec.
39. The Commission sought further information on the source of contamination of uranium found in the monitoring wells that show values above the provincial drinking water limits. Zircatec responded that, although the contamination is thought to result from past practices, it would continue its monitoring and investigation. CNSC staff concurred that additional information was needed and would be obtained through the monitoring of additional wells and the increased frequency of sampling. Following these findings, CNSC staff noted that it would request Zircatec to take further actions, including remediation, as needed. CNSC staff also noted that based on the current available information, the contamination appears to be confined to the immediate area under the facility and is not, in its opinion, posing an immediate risk to health, safety, and the environment.
40. The Commission noted that it expects a detailed investigation of this situation, through appropriate technical studies and analysis, to understand the nature of the groundwater contamination and the possible migration of the contamination. The Commission also expressed the need for Zircatec to develop a communication strategy to inform the public on the eventual findings and, if necessary, further action plans.

41. A number of intervenors expressed concern with the potential impacts the operations of the facility may have on the environment. Several intervenors stated that the facility is too close to the populated area without an appropriate containment structure for radiation protection (or “buffer zone”).
42. The Commission took notice of these concerns, which were also expressed at the mid-term hearing held on February 23, 2005. The Commission also considered CNSC staff’s report regarding the results of a risk analysis of the facility operations conducted by an independent consultant. This study systematically reviewed the process operations to identify potential hazards and/or operability problems and their mitigating measures. CNSC staff further noted that potential hazards and risks associated with all credible accident events at the facility were re-assessed and documented by Zircatec in a report titled “Safety Analysis Report Revision 0, dated March 2006”. The report indicated that the existing preventive and mitigation measures in place are adequate for the protection of the environment and the health and safety of persons. Thus, the Commission is of the opinion that these results combined with Zircatec’s environmental protection performance, as supported by the monitoring data, are sufficient evidence to conclude that the operations of the facility, as it exists, do not pose an unreasonable risk to the environment or to the public.
43. Certain intervenors questioned the validity of the environmental data supplied by the licensee based on the opinion that the data is not verified by an independent source.
44. The Commission notes that it is of the opinion that the licensee is qualified to carry out environmental and effluent monitoring. The Commission also notes that the CNSC staff is independent of the industry and carries out independent verification and inspections of the facility as part of its on-going regulatory compliance activities.

Flooding

45. Zircatec addressed concerns raised regarding potential flooding and the interaction of water with enriched material. Zircatec explained that the design of Zircatec’s slightly enriched uranium (SEU) processing line is not solely based on moderator (water) control. Thus, water may be introduced into the processing environment and protection from criticality will be maintained. Zircatec also noted that the Ganaraska Region Conservation Authority (GRCA) has undertaken a study to determine the potential impact on areas surrounding the West Gage’s Creek. Indications from the GRCA suggest that Zircatec’s facility is not within the floodplain. More specifically, knowing that the facility was located near the creek, and in accordance with a recommendation from the Minister of Natural Resources, the GRCA assessed the floodplain for the Probable Maximum Flood (PMF). The determination was that the facility is situated above the PMF.
46. CNSC staff noted that, based on its assessment of the facility and its review of the

previous flood map, it was of the opinion that the risk of flooding is very low and does not anticipate significant changes to the flood line that was defined in 1975. However, as a precautionary measure, CNSC staff noted that it would request that Zircatec submit a contingency plan for the potential event of water infiltrating the building. Following its review of the GRCA report, CNSC staff could also request additional flood proofing for the facility.

Conclusions on Environmental Protection

47. The Commission considered the information provided and concludes that, based on Zircatec's environmental performance and the risks inherent to the facility, the risks to the environment from the operations of the facility are low and reasonable.
48. The Commission is of the opinion that Zircatec has made, and will continue to make, adequate provision for the protection of the environment.

Operating Performance

49. The Commission considered Zircatec's current and past operating performance as an indication of its qualifications to operate its facility and, in doing so, to provide adequate protection for the environment, persons, national security and international obligations.
50. CNSC staff noted that it carries out quarterly inspections of the facility and reviews the licensee's quarterly and annual performance reports. CNSC staff further noted that matters resulting in action notices and deficiencies identified during its inspections and reviews have not posed an unreasonable risk to the environment or the health and safety of persons. Furthermore, CNSC staff stated that Zircatec promptly reported events and took appropriate corrective actions when required. Thus CNSC staff stated that it was satisfied with Zircatec's event detection, reporting, investigation, implementation of corrective actions and lessons learned and concluded that operation of the facility has been in compliance during the licence period.

Conventional Health and Safety

51. The Commission considered information on the non-radiological health and safety of workers at the Zircatec facility. CNSC staff reported that Zircatec has conventional health and safety policies and programs to ensure the protection of workers from physical, chemical and radiation hazards. Zircatec has developed and continues to deliver safety-related training courses to its employees and contractors. Zircatec also has an effective Joint Health and Safety Committee in conformance with the Human Resources and Social Development Canada (HRSDC) regulatory requirements. CNSC staff noted that it considers the health and safety program at the facility and Zircatec's

performance in this area to be acceptable.

52. Zircatec submitted that, based on a consultant's review of key performance indicators used by the Workplace Safety Insurance Board (WSIB), it has had injury claims costs and injury frequency rates below the industry average. Zircatec's performance index also consistently compared favourably against the industry.
53. The Canadian Nuclear Workers Council stated that the union appointed representative on the Joint Health and Safety Committee ensures that health and safety issues are brought to the attention of management and the union.
54. A representative from HRSDC's Labour Program stated that it regularly conducts interventions at the Zircatec facility and finds that Zircatec meets or exceeds the health and safety regulation under the *Canadian Labour Code*⁶.

Safety-related Systems and Criticality Safety

55. Regarding Zircatec's maintenance of the safety-related systems, CNSC staff noted the preventive maintenance program in place to ensure systems are maintained, routinely checked and promptly attended to as necessary. CNSC staff also noted the improvements made during the current licence period by upgrading the underground hydrogen line and installing hydrogen leak detection and alarm systems inside the building.
56. With respect to criticality safety at the facility, Zircatec provided information on its Criticality Control Manual (CCM) that outlines the policies, responsibilities, controls, capabilities and special measures employed by Zircatec to ensure nuclear criticality safety and uranium enriched in the U-235 Isotope (EU) accountability. Zircatec noted that its Criticality Control Committee administers all manufacture involving enriched uranium. The Committee reviews and approves documents and procedures associated with nuclear criticality safety and ensure that rules, regulations and procedures set out in the CCM are being satisfied.
57. CNSC staff submitted that Zircatec's Nuclear Criticality Safety Program in place to prevent nuclear criticality accident meets requirements. Regular CNSC inspections have confirmed compliance with procedures and licence conditions, including on issues such as inventory, safeguards and security, maintenance of detection system and training. CNSC staff also noted improvements made by Zircatec in this area by replacing the existing nuclear criticality detection and alarm system with a new state-of-the-art system. CNSC staff concluded that the risk of nuclear criticality accident is sufficiently low and that, even in an extremely unlikely event, consequences would not be unreasonable.

⁶ R.S.C. 1985, c. L-2.

Conclusion on Operating Performance

58. Based on the information received, the Commission is satisfied with the past performance of Zircatec and is of the opinion that Zircatec is qualified to carry out the activities that a renewed operating licence would authorize in compliance with the applicable CNSC requirements.

Performance Assurance

59. The Commission examined performance assurance, including aspects of quality assurance, organizational structure and safety culture, as a further indication of the adequacy of Zircatec's qualifications and protection measures.

Quality Assurance

60. Zircatec submitted that it has a quality assurance program in effect to ensure that activities are controlled to protect public and worker health, and the environment as well as to ensure safety and security are maintained. To realize this commitment, Zircatec stated it has established a nuclear facility quality assurance program, which meets regulatory requirements. Zircatec further stated that it is committed to assuring, through defined standards, continuous improvement, and open communications, that the manufacturing activities at Zircatec's Port Hope Nuclear Facility are fully compliant with the regulatory requirements and the purpose of the NSCA.
61. CNSC staff reported that Zircatec's quality assurance program and its implementation meet requirements. CNSC staff added that minor deficiencies identified during CNSC inspections were corrected in a timely manner. The effectiveness of the program will continue to be monitored by CNSC staff.

Organizational Structure, Safety Culture and Training

62. In response to the Commission's request for further information on the organizational structure at Zircatec, the licensee provided an organizational chart and explained the reporting structure in place following the recent changes in ownership of the facility.
63. Zircatec also noted the strong safety culture developed and reinforced at the facility over the years, stating that the recent acquisition of control by Cameco is providing additional avenues to enhance its safety programs to corporate wide safety programs. Zircatec submitted that its safety culture continues to move in a positive direction and, in support of this, provided examples of numerous continuous improvement initiatives.
64. The local union, Local 14193 of the United Steelworkers, noted that it is very active in

health and safety and attested to the good safety culture at the facility which has resulted in a good safety performance. This intervenor submitted that the public can be assured that any issue involving public safety or the environment as it relates to the Zircatec facility will be addressed by the onsite union.

65. With respect to the qualifications of its workers, Zircatec noted that it was embracing the systematic approach to training and would be implementing strategies to incorporate the current training programs to align with this approach.

Conclusion on Performance Assurance

66. Based on the above information and considerations, the Commission concludes that Zircatec has in place the necessary performance assurance programs to assure continued acceptable performance at the facility.

Emergency Preparedness and Response

67. The CNSC requires that licensees, as part of their provisions for the protection of persons in the conduct of their operations, be prepared to deal effectively with emergencies that may arise.
68. In this regard, Zircatec stated its commitment to emergency preparedness and provided information on the work carried out during the current licence period to strengthen its performance and enhance its on-site emergency preparedness. Zircatec provided training and practical exercises to both its employees and off-site responders. Zircatec also stated that it had obtained a signed agreement with the Emergency Services for the Municipality of Port Hope Fire Department (PHFD). Recently the roles and responsibilities of the agreed-to Pre-Incident Plan were put in practice during an emergency exercise involving both the PHFD and Zircatec's emergency responders. Zircatec submitted that the exercise was deemed a success and demonstrated the capabilities of the Zircatec response teams in implementing their support duties and their interaction with off-site responders. It also demonstrated that the PHFD is fully capable of providing the level of resources (both in time and the number of responders) to successfully combat a fire incident at the facility as detailed in the Pre-Incident Plan.
69. Zircatec also noted that is a founding member of the Community Awareness and Emergency Response (CAER) organization, which is a coordinated effort between local industry and the municipality to improve community awareness and emergency response capability. Zircatec submitted that the members of CAER are committed to providing assistance and sharing resources in the event of an emergency of any type in the community.
70. CNSC staff submitted that Zircatec has an Emergency Preparedness and Response Plan in place to adequately cover both on-site and off-site credible emergencies. In April

2006, CNSC staff reviewed and accepted Zircatec's revised "Emergency Preparedness Plan and Emergency Response Procedures Manual", Revision 7. CNSC staff also submitted that, with the fire prevention measures, automatic fire detection, suppression and alarm systems and the new service agreement with the PHFD in place, a potential for a large fire to occur at the facility is minimal.

71. Several intervenors expressed the view that Zircatec has not met its fire safety and emergency response duties and responsibilities required by the NSCA. They expressed concern that a major fire at the facility would constitute considerable risks to the environment and the health and safety of the community. In their view, the PHFD and Zircatec are not prepared nor equipped to deal with radiological fires. They urged the Commission not to renew Zircatec's operating licence until all outstanding issues had been addressed, such as the response time to a major fire at the facility as recommended by a consultant.
72. CNSC staff explained how the consultant's recommendation with respect to response time and capability should be interpreted in the context of the fire protection provisions as a system, the aggregate response capabilities available and the risks present. CNSC staff further explained that it assesses the adequacy of the emergency response provisions based upon the nature of the hazards, the potential initiating events, the preventive and mitigating barriers, and the response capabilities that are being provided. In this regard, CNSC staff noted that although there remain certain areas for improvement, a number of improvements have been initiated and most of them implemented by Zircatec. CNSC staff reiterated that the current provisions are adequate, taking into consideration CNSC's role, responsibilities, mandate and authority under the NSCA.
73. The Commission sought further clarification on the issues and concerns raised by the intervenors. Zircatec explained that the PHFD is able to respond to a situation in its main building as it only has uranium oxide as a hazard. Zircatec noted, however, that the PHFD would not respond to a situation in an outside building that contains zirconium material. This would be left to burn up while firefighting capacity would be used to protect other adjacent buildings and structures and protect the environment. The Fire Chief of the PHFD acknowledged that it would have reserves within Port Hope to fight a major fire at the facility, but that it would not currently meet the recommended response time and that these resources would be exhausted very quickly. The Fire Chief added, however, that it has a fund submission for next year to the Port Hope Council to increase the volunteer staffing and perhaps the full-time staff at the PHFD.
74. Considering this information, the Commission expressed the view that additional clarity was needed to fully understand the existing capacity and the need for further improvements to address a major fire at the Zircatec facility.
75. Zircatec provided additional information with respect to firefighting in general, noting that two of the prime areas to be considered when evaluating firefighting capacity, that

is fuel load and rescue requirements, were considered very low at this facility. Zircatec also noted that the response time and capacity recommended by the consultant was based on a combustible building, with no sprinkler system. As Zircatec's building is a non-combustible building and is now equipped with a new sprinkler system and a new fire alarm system, the consultant's recommendations would not be applicable. Zircatec examined the Port Hope firefighting capabilities and concluded that it was more than adequate to combat the typical type of fire possible at this facility.

76. The Commission acknowledges the efforts and improvements made by Zircatec to enhance its emergency preparedness and response performance during the current licence period. The Commission expects that the remaining improvement initiatives will be implemented during the proposed licence period.
77. The Commission concludes that emergency preparedness and response at the Zircatec facility is adequate for the proposed licence renewal.

Fire Protection

78. Zircatec noted that the facility is classified as a Group F Division 3 rating, which is the lowest fire hazard rating for an industrial facility according to the Building Code Occupancy Hazard Rating. This hazard classification is largely due to the ongoing efforts to minimize fire loading, the fact that Zircatec's main product is UO₂ and zirconium tubing, which are both non-flammable and non-combustible, and that the main building has a sprinkler system.
79. Zircatec submitted that it conducts and submits to the CNSC staff, third party reviews of renovated areas and that, in the current licence period, there have been 11 *National Fire Code of Canada (1995)* and *National Building Code of Canada (1995)* audits of the facility. Zircatec further submitted that none of the deficiencies identified in these audits were of a nature that would pose a significant threat to the safety of Zircatec employees, the public, or the environment, and that it is currently working toward addressing each of the issues identified. Zircatec noted that one of the actions taken has been to engineer a method of containment (door berms with existing sump pit) to keep the water inside the facility for clean up post-incident. Zircatec provided further information on other continuous improvement initiatives performed to enhance fire safety at the facility.
80. CNSC staff noted that Zircatec's fire protection program and its implementation meet requirements. CNSC staff inspected the facility against the *National Fire Code* and stated that the deficiencies identified do not pose an unreasonable risk and have been, or are being addressed according to schedule. CNSC staff recommended a modification to the existing licence conditions to reference revised *National Building Code of Canada* and the *National Fire Code of Canada* and include a reference to the NFPA-

801 (2003) standard⁷. CNSC staff also noted the several improvements made during current licence period.

81. The Commission sought assurances that the expectations regarding the proposed new licence conditions were understood by the licensee. To ensure that sufficient time would be allocated for the licensee to implement the required changes, CNSC staff proposed a transitional period for implementing the proposed new fire safety standard. CNSC staff submitted this transitional period would not pose an unreasonable risk to persons or to the environment.
82. The Commission is satisfied that adequate provisions are being made to ensure that the facility has the necessary fire protection measures.
83. Based on the licensee's commitment to enhance its facility's existing fire safety program, the Commission concludes that the fire protection provisions that the licensee currently has in place at the facility do not pose an unreasonable risk to persons or to the environment.

Security

84. CNSC staff state that the *Nuclear Security Regulations*⁸ are applicable to this facility, as it handles un-irradiated enriched uranium materials of Category III. CNSC staff recommended that Zircatec's Physical Security Manual, Revision 1, dated May 2006, be referenced in Appendix B to the proposed licence.
85. While it would not be appropriate for the Commission to discuss security matters in detail in a public document, such as this *Record of Proceedings*, the Commission is satisfied that Zircatec's performance with respect to maintaining security at the facility has been acceptable.
86. The Commission concludes that Zircatec has made, and will continue to make, adequate provisions for ensuring the physical security of its facility.

Public Information Program

87. During the current licence period, Zircatec developed and finalized a Public Information Program (PIP) that includes an internal PIP Committee that meets on a quarterly basis to review and grade material provided to the public as well as information gathered from the public. The PIP Committee then assesses the effectiveness of the initiatives for the quarter and develops new initiatives for the next quarter. Zircatec noted that it also identifies and assesses major issues for appropriate

⁷ National Fire Protection Association, *NFPA-801: Standard for Fire Protection for Facilities Handling Radioactive Materials*, 2003 edition.

⁸ S.O.R./2000-209.

responses, if required. Other initiatives were used as tools for providing information to the public regarding nuclear issues. Zircatec personnel also staffed booths at numerous venues that targeted a wide variety of people to answer questions, provide information, and address concerns. In addition, Zircatec provided a number of tours of the facility to local organizations.

88. Zircatec stated that, since the mid-term performance hearing held in 2005, its has committed considerably more resources to provide information to the public regarding its operations, environmental impact, transportation issues and other pertinent information. In an effort to meet with most of the intervenors who presented at the mid-term review, the PIP committee presented information on their concerns and held a question and answer period. Zircatec also recently held an Information Day, opened to the general public to provide information on the general operations of the facility as well as the changes that are being requested during re-licensing. Due to the success of this event, Zircatec has decided to hold additional Information Days in the future.
89. Zircatec also noted that it actively participates in Cameco's Community Forum sessions that provide the public with information on community identified issues. These forums provide the information collected from the community during the first session and allows for further input and requests at the end of the session to be included in future sessions.
90. CNSC staff noted that Zircatec's public information program is acceptable.
91. Concerned that the public did not have access to relevant information in a timely manner, an intervenor suggested that a local committee be established, providing a monthly analysis report of current developments through quarterly meetings.
92. The Commission notes the recent initiatives taken by the licensee during the current licence period to improve communication with the community of Port Hope. The Commission further expresses the importance of a licensee's PIP to help develop and build public trust in the licensee's capacity to plan and carry on its licensed activities safely and, in doing so, making adequate provisions for the protection of the environment and the public.
93. The Commission is of the view that several of the concerns expressed by the intervenors were a result of insufficient communication on the part of the licensee with respect to such areas as operational activities, environmental monitoring methods and results, and initiatives planned or carried out by the licensee in the past. Thus, the Commission expects that Zircatec's PIP will continue to improve to ensure that the public is well informed during the proposed licence period.
94. Based on the information received, the Commission is satisfied with the improvements made to date and is of the view that Zircatec's Public Information Program is adequate for the proposed licence period.

Decommissioning and Financial Guarantees

95. In order to ensure that adequate resources will be available to meet the regulatory requirements for safety, environmental protection and security during the future decommissioning of Zircatec's facility, the Commission requires that adequate plans and financial guarantees for decommissioning and long-term management of waste be put in place and maintained acceptable to the CNSC.
96. Zircatec stated that its Preliminary Decommissioning Plan (PDP) dated December 2001 surveyed the facility and processes of the day. Since the PDP is a living document, this report must be updated on a regular frequency to ensure that all relevant information is up to date. Thus, Zircatec submitted a draft updated PDP to the CNSC staff for its review. Because of matters such as labour costs, disposal and transportation costs, Zircatec noted that the updated cost estimate for decommissioning has increased to \$13.9 million. Accordingly, Zircatec has made arrangements to update the Irrevocable Standby Letter of Credit to ensure such decommissioning costs are fully covered.
97. CNSC staff note concurred with Zircatec that the estimated decommissioning cost in the updated PDP is approximately \$13.9 million. CNSC staff has reviewed Zircatec's PDP and associated financial guarantee cost estimate, dated September 2006, and has concluded that the PDP and decommissioning cost estimate require further revision before CNSC staff can recommend acceptance of the proposed financial guarantee to the Commission. CNSC staff has provided its comments to Zircatec and requested a response by December 15, 2006. Once Zircatec's revised PDP and financial guarantee cost estimate is received, reviewed and recommended by CNSC staff, it will be forwarded to the Commission for its consideration and decision. Subject to the Commission's acceptance of the new PDP and financial guarantee, CNSC staff will request the licensee submit an amended letter of credit to cover the full cost of the proposed financial guarantee in accordance with licence requirements.
98. Concerned with the length of time it is taking to address the matter, the Commission sought further explanation as to why the PDP and associated cost estimates had yet to be in place and whether the currently proposed decommissioning cost was close to what could be expected for this facility. In response, CNSC staff provided some explanation for the delay, which was partly due to the PDP covering the proposed SEU project at one point and to a number of areas that were not in compliance with the CNSC Regulatory Guide G-206⁹. However, CNSC staff noted that to date it had not seen any problem with Zircatec being able to maintain the financial guarantee nor did it anticipate any problems with the increased financial guarantee. In its capacity as the owner of Zircatec, Cameco confirmed that upon receipt of the notification of acceptance of the PDP and the associated cost estimates by the CNSC, it will put in place the required financial guarantee.

⁹ CNSC Regulatory Guide G-206, *Financial Guarantees for the Decommissioning of Licensed Activities*, June 2000.

99. Based on this information, the Commission considers that the plans for completing the Preliminary Decommissioning Plan and related financial guarantee are acceptable for the purpose of the current application for licence renewal.

Safeguards and Non-Proliferation

100. Zircatec submitted that it has been working with the CNSC safeguards staff to finalize a site Design Information Questionnaire (DIQ) in order to meet International Atomic Energy Agency (IAEA) requirements for the implementation of the Comprehensive Safeguards Agreement. Zircatec also noted that there have been no significant issues arising from the IAEA's scheduled yearly simultaneous physical inventory verification and interim inventory verifications.
101. CNSC staff reported that Zircatec's program for the safeguarding of material and non-proliferation and its implementation meet expectations. CNSC staff recommended a licence condition modification in preparation for the publication of a new CNSC regulatory standard on the reporting requirements for fissionable and fertile substances.
102. Based on this information, the Commission is satisfied that Zircatec has made, and will continue to make, adequate provisions in the areas of safeguards and non-proliferation that are necessary for maintaining national security and measures necessary for implementing international agreements to which Canada has agreed.

Environmental Assessment

103. Before making a licensing decision, the Commission must be satisfied that all applicable requirements of the *Canadian Environmental Assessment Act*¹⁰ (CEAA) have been fulfilled.
104. CNSC staff submitted that the renewal of Zircatec's operating licence is not included in the *Law List Regulations* made pursuant to paragraph 59(f) of the CEAA and is not a "trigger" pursuant to Subsection 5(1) of the CEAA.
105. CNSC staff submitted that Zircatec's licence renewal request includes a request for the amendment of certain conditions. Amendments are "triggers" under Paragraph 5(d) of the CEAA. The requested amendments would: update the fire protection conditions and Criticality Control Manual, update the reporting requirements regarding workers' radiation doses, and add new manuals for Emergency Response Procedures and Physical Security. CNSC staff submitted that these amendments do not change the operations at the facility and do not enable a new project to proceed. Therefore, the amendments are not a "project", as defined by the CEAA and do not trigger an environmental assessment under CEAA.

¹⁰ S.C. 1992, c. 37.

106. The Commission accepts CNSC staff's interpretation of the CEAA and thus is satisfied that the requirements of the CEAA for an environmental assessment of Zircatec's application for licence renewal have been fulfilled. The Commission concludes that no further environmental assessment is required, pursuant to the CEAA, before the Commission may consider and make a decision on this licence application under the NSCA.

Licence Term and Interim Reporting

107. Zircatec applied to the CNSC for renewal of its operating licence for a period of five years.
108. CNSC staff recommended that the Commission accept the proposed five-year term on the basis of a number of criteria listed in CMD 02-M12¹¹. CNSC staff also noted that it was prepared to submit a mid-term performance report to the Commission in the fall of 2009.
109. A number of intervenors expressed their support of the licence renewal for a five-year term. Some of these intervenors expressed their view that the facility was being operated safely and further noted the numerous improvements made by Zircatec during the current licence period. This included improvement in protection systems, in areas of health and safety, and in practices with regard to environmental protection and safety.
110. Several intervenors recommended a shorter licensing period and more stringent restrictions on the operating licence. Intervenors also recommended increased monitoring of the licensee's compliance with regard to radiation and environmental protection, fire protection, workers safety and general health issues.
111. Regarding intervenors' comments on the lack of regulatory compliance by the licensee, the Commission notes that CNSC staff has carried out and will continue to carry out a comprehensive compliance program throughout the licence period. The Commission is satisfied that through this program non-compliance issues are promptly identified and can be adequately addressed. The Commission further notes that CNSC staff reports any event to the Commission that would meet the criteria for a Significant Development Report. Thus, based on past performance, the Commission is confident that regulatory compliance has not been an issue for this licensee.
112. Based on the information provided, the Commission concludes that a five-year licence term is acceptable. The Commission requires, with this decision, that CNSC staff present a status report on the mid-term performance of the licensee to the Commission following the mid-term of the licence period (i.e., approximately in October 2009).

¹¹ Commission Member Document CMD 02-M12, *New Staff Approach Used to Recommending Licence Period*.

Conclusion

113. The Commission has considered the information and submissions of CNSC staff and all participants as set out in the material available for reference on the record, as well as the oral and written submissions provided or made by the participants at the hearing.
114. The Commission concludes that an environmental assessment of the proposed continued operation of the facility, pursuant to the *Canadian Environmental Assessment Act* is not required.
115. The Commission is of the opinion that the applicant satisfies the requirements of subsection 24(4) of the *Nuclear Safety and Control Act*. That is, the Commission is of the opinion that Zircatec is qualified to carry on the activity that the licence would authorize; and, in carrying on that activity, that Zircatec will make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.
116. The Commission therefore issues, pursuant to section 24 of the *Nuclear Safety and Control Act*, licence FFOL-3641.0/2012 to Zircatec Precision Industries Inc. The licence will be valid from March 1, 2007 to February 29, 2012, unless suspended, amended, revoked or replaced.
117. The Commission includes in the licence the conditions recommended by CNSC staff, as set out in the draft licence attached to CMD 06-H19 and CMD 06-H19.B.
118. As noted throughout this *Record of Proceedings*, the Commission acknowledges the interest and understands the concerns of the Port Hope community in this matter.
119. The Commission expresses its view that the Zircatec facility operations are effectively controlled with the safety programs in place and that they do not pose an unreasonable risk to the health and safety of persons, the environment and national security. The Commission is of the view that the continued enhanced public communication will help develop and build public trust in the licensee's qualifications and in the provisions it makes to meet the requirements of the NSCA.
120. The Commission requires that CNSC staff present a status report to the Commission at the mid-term of the licence period (i.e., approximately October 2009). The CNSC staff's status report shall provide a summary of the performance of the licensee and facility. The mid-term report will be presented at a public proceeding.

Linda J. Keen
President,
Canadian Nuclear Safety Commission

Date of decision: November 30, 2006

Date of release of Reasons for Decision: February 26, 2007

Appendix A – Intervenors

Intervenors	Document Number
Dan Rudka	CMD 06-H19.2 CMD 06-H19.2A
Alice Mailath	CMD 06-H19.3
Dennis j. Landwehr	CMD 06-H19.4
John Morand	CMD 06-H19.5 CMD 06-H19.5A
John Belle	CMD 06-H19.6
Families Against Radiation Exposure (F.A.R.E.), represented by J. Miller	CMD 06-H19.7 CMD 06-H19.7A
Rodney J. Anderson	CMD 06-H19.8
Stan R. Blecher	CMD 06-H19.9
George Clements	CMD 06-H19.10
Bart Hawkins Kreps	CMD 06-H19.11
Joe Berney	CMD 06-H19.12
United Steelworkers, Local 14193, represented by R. Stata	CMD 06-H19.13
Canadian Nuclear Workers Council, represented by R. Stata and J. Husher	CMD 06-H19.14 CMD 06-H19.14A
G. Albert Barraclough	CMD 06-H19.15
Louise Barraclough	CMD 06-H19.16
Limelight Advertising & Design	CMD 06-H19.17
Phill Boyko	CMD 06-H19.18
Port Hope & District Chamber of Commerce, represented by H. Hills	CMD 06-H19.19
John Diez	CMD 06-H19.20
James T. Hunt	CMD 06-H19.21
Miriam Mutton	CMD 06-H19.22
Bill Crowley	CMD 06-H19.23
Celeste Stewart-McNamara	CMD 06-H19.24
Municipality of Port Hope, represented by C. Cannon and M. Stephenson	CMD 06-H19.25
Sanford and Helen Anne Haskill	CMD 06-H19.26
Steve Kahn	CMD 06-H19.27
Holly Bleggen	CMD 06-H19.28
Ian W.M. Angus	CMD 06-H19.29
Vipond Fire Protection Inc., represented by K. Middlestadt	CMD 06-H19.30
CAIR, represented by J. Morand	CMD 06-H19.31 CMD 06-H19.31A
Julliet Fullerton	CMD 06-H19.32
Pat McNamara	CMD 06-H19.33
Robert Lang	CMD 06-H19.34
Patricia Lawson	CMD 06-H19.35
Tom Lawson	CMD 06-H19.36
Ray Morand	CMD 06-H19.37

Peter M. Blecher	CMD 06-H19.38
Louise Ferrie-Blecher	CMD 06-H19.39
Curtis Brisbois	CMD 06-H19.41
Stephen Sneyd	CMD 06-H19.42
Danielle Sneyd	CMD 06-H19.43
Sierra Legal Defence Fund, represented by H. Wilkins	CMD 06-H19.44
Brian Parr	CMD 06-H19.45
Ted Dingman	CMD 06-H19.46
Lou Rinaldi, M.P.P., Northumberland	CMD 06-H19.47
Ian P. Tate	CMD 06-H19.48
Diana and Matt Flesch	CMD 06-H19.49
Donna Snowden	CMD 06-H19.50
Anna Mosher	CMD 06-H19.51
Len Butterley	CMD 06-H19.52
Lynda Hook	CMD 06-H19.53
Michael Gagnier	CMD 06-H19.54
Lisa McCracken	CMD 06-H19.55
Lorne VanderDussen	CMD 06-H19.56
Bill Woodman	CMD 06-H19.57
David Doherty	CMD 06-H19.58
Don Austin	CMD 06-H19.59
Wayne Byers	CMD 06-H19.60
Stewart Raynor	CMD 06-H19.61
Laurie B. Johnson	CMD 06-H19.62
Carolyn Heslop	CMD 06-H19.63
David Larkman	CMD 06-H19.64
Ed Lloyd	CMD 06-H19.65
Marcin Ryglewicz	CMD 06-H19.66
Randy Horton	CMD 06-H19.67
Gordon N. Walter	CMD 06-H19.68
Paul Macklin	CMD 06-H19.69
Irene Fraser	CMD 06-H19.70
Shelley Boyce	CMD 06-H19.71
Warren Gingrich	CMD 06-H19.72
Chris Brown	CMD 06-H19.73
Karen Eva	CMD 06-H19.74
Cynthia Davies	CMD 06-H19.75
Susan Hamilton	CMD 06-H19.76
Dean McCubbin	CMD 06-H19.77
Jacqueline M. Raftis	CMD 06-H19.78
Edna Bosnell	CMD 06-H19.79
Rob Brulé	CMD 06-H19.80
Laurie Batchellor	CMD 06-H19.81
Laurie Debattista and Sean Bradley	CMD 06-H19.82
Doug Hodgins	CMD 06-H19.83

Brian and Kathy Piercey	CMD 06-H19.84
Elizabeth Burke	CMD 06-H19.85
Sarah Burke	CMD 06-H19.86
Terry Highfield	CMD 06-H19.87
Lakeland Multi-Trade Inc.	CMD 06-H19.88
Paul Knott	CMD 06-H19.89
Marleen Campbell	CMD 06-H19.90
Community Awareness and Emergency Response	CMD 06-H19.91
Gregory James Perry	CMD 06-H19.92
Christine Redwood	CMD 06-H19.93
Rick Norlock	CMD 06-H19.94
Anna M.V. Mutton	CMD 06-H19.95
David Jones	CMD 06-H19.96
Eric Potter	CMD 06-H19.97
Betty Finnie-Hunt	CMD 06-H19.98
Russell Boate	CMD 06-H19.99
Northumberland United Way	CMD 06-H19.100
Michael David Jessup	CMD 06-H19.101
Dave Gilbert	CMD 06-H19.102
Valerie Coatham	CMD 06-H19.103
Rhonda Perry	CMD 06-H19.104
Vandermeer Toyota	CMD 06-H19.105
Colleen and Jim Dobie	CMD 06-H19.106
Matt Alfred	CMD 06-H19.107
Ronaldo Dalla Rosa	CMD 06-H19.108
Rose Campbell	CMD 06-H19.109
Brian Board	CMD 06-H19.110
Jackie Brimblecombe	CMD 06-H19.111
Shawn Inwards	CMD 06-H19.112
Lake Ontario Waterkeeper	CMD 06-H19.113
Elizabeth Benne	CMD 06-H19.114
Anita Blackwood	CMD 06-H19.115
Esther Valliant	CMD 06-H19.116
Debbie Abrams	CMD 06-H19.117
Simon J. Reid	CMD 06-H19.118
Elaine Cowling	CMD 06-H19.119
Nigel Hall	CMD 06-H19.120
Connie Duncan	CMD 06-H19.121
Margaret King	CMD 06-H19.122
Wakely Transportation Services Limited	CMD 06-H19.123
Northumberland Manufacturers' Association	CMD 06-H19.124
Port Hope Community Health Concerns Committee, represented by F. More	CMD 06-H19.125 CMD 06-H19.125A
Roger N. Carr	CMD 06-H19.126