



The Safety Association for Canada's
Upstream Oil and Gas Industry

July 28, 2017

Hon. Kathleen Ganley
Minister of Justice and Solicitor General
Office of the Minister
Justice and Solicitor General
424 Legislature Building
10800 - 97 Avenue
Edmonton, AB T5K 2B6

Dear Hon. Kathleen Ganley:

Re: Enform's Submission to the Cannabis Secretariat on Alberta Cannabis Engagement

Please find below the submission of Enform Canada ("Enform") to the Cannabis Secretariat on Alberta Cannabis Engagement.

Enform is the national safety association for Canada's upstream oil and gas industry and has offices in Alberta, British Columbia and Saskatchewan. Enform was created by the oil and gas industry as a not-for-profit organization dedicated to meeting industry's safety needs. Enform's Board of Directors is comprised of members from the following six industry trade associations: Canadian Association of Geophysical Contractors ("CAGC"), Canadian Association of Oilwell Drilling Contractors ("CAODC"); Canadian Association of Petroleum Producers ("CAPP"); Canadian Energy Pipeline Association ("CEPA"); Explorers and Producers Association of Canada ("EPAC"); and, Petroleum Services Association of Canada ("PSAC").

Workplace safety and the legalization of cannabis - Recommendations

Employers have onerous legislative obligations to ensure the safety of their workforce.¹ This includes reducing any risks caused by alcohol or drug use at or before attending work. The oil and gas industry is concerned about the impacts the legalization of cannabis will have on an employer's ability to ensure workplace safety. Although the federal government has addressed road side safety in its recent legislation, it has not proposed any measures to address workplace safety implications. We ask that the government take steps to ensure a risk management approach to workplace safety to prevent incidents from occurring. We request that the following two key recommendations be considered and reflected in pending policies, regulations, and legislation:

- **Risk Management approach to cannabis in the workplace.** The use, storage and sale of cannabis be prohibited from the workplace. Further there should be a prohibition on the use of marijuana at work or in close temporal proximity to work given the inherent safety risks associated with use of marijuana.
- **Harmonized labour and workplace legislation across Canada:** Engagement between the Alberta Government, Government of Canada and other jurisdictions to ensure consistency in labour and workplace legislation nationally.

¹ See e.g. *Canada Labour Code*, R.S.C. 1985, c. L-2, at ss. 124, 126; *Occupational Health and Safety Act*, R.S.A. 2000, c.O-2, at ss. 2(1), 2(2); *Occupational Health and Safety Code, 2009*, at ss. 1, 7, 9(1); *Criminal Code*, R.S.C. 1985, c. C-46, at s. 217.1.



In the last several decades, the upstream oil and gas industry has made significant advancements in the improvement of safety practices and safety culture in the workplace. For this trend to continue, and to reach industry's goal of zero incidents and injuries, we must ensure that legislation allowing for the use of cannabis does not impact the obligation of employers to maintain a safe work environment and the rights of employees to work in a safe environment.

Drugs, alcohol and industry risks

The use of alcohol and drugs by those who work in the upstream oil and gas sector in safety-sensitive environments has been a pressing concern for our industry. Industry further shares the concern that both cannabis consumption and safety risks will rise with its legalization. In the United States, where seven states have legalized the use of recreational cannabis, research shows a direct correlation between legalization, increased consumption and increased traffic fatalities. Studies confirm there is a correlation between cannabis use and injury. In 2017 an article² in the Canadian Journal of Addiction concluded that the impact of legalization on safety sensitive workplaces remains an insufficiently explored occupational risk issue. Canadian researchers are, therefore, concerned about the potential for increased incidents in safety-sensitive positions.³

These underlying concerns are focused on the inherently risk-sensitive realities of the upstream oil and gas industry. Different functions of the industry, including storage, transportation, drilling, producing and refining, all involve the use of hazardous materials and machinery. Given the flammable nature of natural gas and oil, risks are increased in the event of a leak or spill. Owners, companies and workers must exercise the utmost care and attention as the potential for catastrophic environmental and life-threatening consequences is always present at industrial worksites. These concerns engage important public interests as a catastrophic incident at an industrial worksite could have potentially devastating consequences for workers, the public and the environment.

As discussed below, the effects of cannabis use include negative impacts on attentiveness, motor coordination and reaction time. Given the carry-over effects of drugs, including marijuana and other cannabinoids, these risks are present whether consumption occurs at work or days before work begins.

Additionally, upstream petroleum operations are often located in remote locations. Employees performing work often have limited supervision and are required to assume a degree of independence. Workers are mobile and travel from one site to another, frequently accessing public highways and travelling through communities.

Employers in the upstream oil and gas sector have a responsibility to prevent workers who may be unfit for duty from engaging in activities that could have devastating consequences for themselves, their co-workers and the communities in which they operate.

² Canadian Journal of Addiction (CJA), 2017

³ Charl Els, Aditi Amin, & Sebastian Straube, Canadian Journal of Addiction (2017)



Background on Industry Concerns

Risk Management approach to cannabis in the workplace:

Regulations prohibiting the use or possession of drugs in the workplace currently exist in the mining sector, federally, and in the provinces of British Columbia, Manitoba, Saskatchewan and Ontario.⁴ Enform recommends that similar legislation be enacted in Alberta, particularly for safety-sensitive industries such as oil and gas. That must include prohibitions on the use, storage and sale of cannabis at the workplace or in close proximity to the workplace. The rights of individuals to use recreational cannabis cannot outweigh the obligation of employers to maintain a safe work environment and the rights of all employees to work in a safe environment.

Workplace safety risks associated with cannabis use

Research reveals that psychomotor and cognitive deficits associated with use of cannabis, include hallucinations, visual disturbances, inability to concentrate, and decreased motor control, decreased ability to respond quickly to events and an inability to drive safely.⁵ People under the influence of cannabis also have poor short-term memories which can impair decision-making and create safety issues in complex operations. There is a correlation between marijuana use and injuries.⁶

Given the performance deficits, it is clear that marijuana use is incompatible with working in a safety-sensitive workplace. Marijuana use by drivers has been associated with increased accidents and fatalities.⁷ Studies reviewing the effects of marijuana have concluded that “any situation in which safety both for self and others depends upon alertness and capability of control of man-machine interaction precludes the use of marijuana”.⁸ Similarly, a 2006 study of marijuana users found that marijuana use was associated with lower alertness and slower response times. This study further found that users experienced working memory problems at the start and psychomotor slowing and poorer episodic recall at the end of the work week. The authors determined the results suggested a “hangover” type effect and a subtle effect on cognitive function, more apparent under cognitive load and fatigue.⁹ These are all performance deficits which pose unique safety risks in safety-sensitive work environments.

Further, performance deficits can last up to two days after use of a low dose of marijuana.¹⁰ In a study involving nine pilots ingesting 20 mg of THC, the use of marijuana adversely affected performance at 24 hours after smoking. Further, despite seven of the nine pilots showing some degree of deficit at 24 hours after smoking, only one reported any awareness of the drug’s effects. The authors indicated the data “suggest[s] that very complex human/machine performance can be impaired as long as 24 hours after

⁴ See e.g. *Coal Mining Occupational Health and Safety Regulations*, SOR/90-97, s. 142; *The Health, Safety and Reclamation Code for Mines in British Columbia* 2008, ss 3.1.1, 3.1.2; *Operation of Mines Regulation*, Man Reg 212/2011, s 4.9; *The Mines Regulations*, 2003, RRS c O-1.1 Reg 2, s 21; *Mines and Mining Plants*, RRO 1990, Reg 854, s. 15.

⁵ National Institute on Drug Abuse (NIDA), 2017

⁶ See for instance, Gerberich, Susan Goodwin, et al, Marijuana Use and Injury Events Resulting in Hospitalization, (2003) 13 *Annals of Epidemiology* 230-237. Nearly 65,000 individuals were examined. Over 13,000 were current marijuana users. The study found that male marijuana users had a 28% higher rate of hospitalization due to injuries than non-users and female users had a 37% higher rate of the same.

⁷ M-C Li et al., Marijuana use and motor vehicle crashes, (2012) 34 *Epidemiol. Rev.* 65; M. Asbridge et al., Acute cannabis consumption and motor vehicle collision risk: systematic review of observational studies and meta-analysis, (2012) 344 *BMJ* e536.

⁸ M. Huestis, “Cannabis (Marijuana) – Effects on human behavior and performance” (2002) 14:1/2 *For. Sci. Rev.* 15 at 45. It is also of note that studies regarding marijuana use and its effects generally administer doses that are lower than doses used in the real world (JG Ramaekers et al, “High-potency marijuana impairs executive function and inhibitory motor control” (2006) 31 *Neuropsychopharmacology* 2296 at 2296).

⁹ E. Wadsworth et al., “Cannabis use, cognitive performance and mood in a sample of workers” (2006) 20:1 *J. Psychopharm.* 14.

¹⁰ S. Heishman et al., “Acute and residual effects of marijuana: Profiles of plasma THC levels, physiological, subjective, and performance measures” (1990) 37:3 *Pharmacol. Biochem. Behav.* 561.



smoking a moderate social dose of marijuana, and that the user may be unaware of the drug's influence...[a]ny time our limited capacity working memory is presented with more information than it is able to process, marijuana carry-over effects may occur".¹¹

Additional performance deficits are associated with long-term chronic marijuana use. Chronic daily users initiate responses more slowly and have poor performance on critical tasks. One study has shown that chronic daily users have significantly greater performance deficits than occasional users throughout three weeks of abstinence.¹²

There is also a recognized abstinence and withdrawal syndrome associated with alcohol and drugs.¹³ For instance, a study by the Harvard Medical School examined heavy marijuana users and found that abstinent heavy users experienced adverse effects, including anxiety and violent and aggressive behaviour, for three to seven days and, for some, as long as 28 days.¹⁴

Therefore, marijuana, is a safety hazard that has no place in safety-sensitive work environments.

Harmonization of labour and workplace safety legislation

To ensure a consistent and balanced approach to regulations on workplace safety and cannabis use, cooperation between the Alberta Government, the Government of Canada and other jurisdictions is key. Some employers operate in multiple provinces and knowing all of the varying rules and parameters can become a complex challenge. This means governments at all levels and across all provinces, need to work together to ensure that employers understand their rights and responsibilities relative to cannabis legalization and the adoption of workplace drug and alcohol policies. Harmonized legislation and regulation that is consistent across the provinces and territories would be an important step in ensuring that clarity.

Alcohol and Drug Task Force – a collaborative model

The Construction Owners Association of Alberta (COAA), which developed the Alcohol and Drug Guidelines and Work Rule (the "Canadian Model"), and which Enform adapted into the Alcohol and Drug Policy Model for the Canadian Upstream Petroleum Industry (the "Upstream Petroleum Industry Model"), are in the process of working together to create one joint industry standard, to be issued in the fall of 2018. We believe this model could serve as a guide for other industries across Alberta and other jurisdictions.

Conclusion

Enform and its industry partner associations have been engaging with governments at all levels on this matter and our interest remains strong in actively participating in ongoing fact gathering, discussions and the development of appropriate regulations, policies and legislation that supports safe operations in our industry. Enclosed you will find Enform's submission to the Task Force on Marijuana Legislation, Regulation and Restriction, dated August 29, 2016.

¹¹ V. Leirer et al., "Marijuana carry-over effects on aircraft pilot performance" (1991) 62:3 Aviat. Space Environ. Med. 221 at 221, 226.

¹² WM Bosker et al., "Psychomotor function in chronic daily cannabis smokers during sustained abstinence" (2013) 8:1 PLoS One 1.

¹³ See also DSM V (American Psychiatric Association (2013). Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. Washington, DC: American Psychiatric Publishing, at pp. 516-519).

¹⁴ E. Kouri and H. Pope, "Abstinence symptoms during withdrawal from chronic marijuana use" (2000) 8:4 Exp. Clin. Psychopharmacol. 483.



The Safety Association for Canada's
Upstream Oil and Gas Industry

Enform believes there should be support for ongoing research and development of testing technologies. The industry remains united in its conviction that zero-tolerance policy towards cannabis use in the workplace should be reflected in regulations, policies and legislation regarding the legalization of cannabis. Further, the harmonization of legislation across all levels of government is required to keep workplaces safe from potentially catastrophic consequences.

Sincerely,

Cameron MacGillivray
President and CEO, Enform