Canadian Forces Ombudsman 100 Metcalf Street, Ottawa, Ontario K1P 5M1

James T. Towers CD (Sgt Retired)

Reference: In 2004, the Department of National Defence and Federal Government of Canada, established two conflicting rulings regarding mustard agent, identified as a 13% solution of the active vesicant agent HT (mustard gas), mixed in the solvent DEP, code-named TA66/1(Y). The agent was utilized by the Canadian Forces, in two separate military user trials, code-named Adobe and Vacuum, at Suffield Experimental Station in 1966 and 1968.

RECONSIDERATION REQUEST & SUBMISSIONS:

Dear Mr. Gregory Lick,

Respectfully, the Department of National Defence and Governments alleged errors in fact and law, have tarnished the past service of Exercise Vacuum veterans, utilized by the Canadian Forces, in a verified Chemical Testing Experiment, using mustard agent, at Suffield Experimental Station in 1968. This grievance presents new direct and circumstantial evidence, repudiating the erroneous findings used by the Department of National Defence, and Governments adjudication process. Which denied all Chemical Warfare Agent Testing Recognition Program applications, filed by Exercise Vacuum veterans throughout 2004/2006. Stating, "the service you have claimed does not meet the criteria for the award of an *ex-gratia* payment under this program's guidelines."

In 2005, Veterans Affairs Canada Research and Information Directorate, provided Veterans Affairs Canada, Bureau of Pension Advocates/Lawyers, and Adjudicators with new direct evidence, attesting too experimental testing, using mustard agent, while participating in Exercise Vacuum, at Suffield Experimental Station in 1968. Which belies the conclusions articulated against Vacuum participants, by the Department of National Defence and Government of Canada.

It further indicates, significant and legitimate discrepancies whereas; the Department of National Defence and Government of Canada in 2004, established under its authority two conflicting principles or rules, relating to a 13% solution of the active vesicant agent HT (mustard gas) mixed in the solvent DEP, code-named TA66/1(Y).

Adobe participants, who first evaluated the agent, during a three-day military exercise at Suffield Experimental Station in 1966, were advised they met all criteria which earned them recognition and the award of an *ex-gratia* payment. Under its authority, the Department of National Defence, and Government of Canada deemed TA66/1(Y), as being a chemical warfare agent in 2004.

Vacuum participants, who evaluated newly developed protective clothing and equipment at Suffield Experimental Station in 1968, entailed soldiers <u>crawling</u> throughout a 500-meter field, contaminated with the same identical chemical warfare agent, as that used in Adobe. In addition, Vacuum participants were utilized in further experimental activities, involving the mixing and heating of toxic chemicals into much more potent and dangerous, vapours and smokes.

Under its authority, the Department of National Defence, and Government of Canada, deemed mustard agent, code-named TA66/1(Y) as being a proven and safe training agent, for Vacuum participants in 2004. Stating, "most participants were exposed to "CS" tear gas. This and other chemical warfare training agents, help create realistic battle conditions without toxic effects of chemical agents. The user trial/troop test code-named Exercise Vacuum, was, overall deemed to be a training event."

That adjudication, does not accord with new direct evidence, provided by Veterans Affairs Canada Research and Information Directorate, nor does it accord with the legal affirmations, made by the Bureau of Pension Advocates, and Adjudicators who testified. "Based on additional information from our Veterans Affairs Canada Research and Information Directorate, the evidence indicates that you could have been exposed to mustard gas or similar agent, while in the performance of your military duties, when experimental testing was being performed at Suffield Experimental Station."

The legitimate statutory interpretation, of the agent used during Vacuum, is that of mustard agent. Veterans Affairs Canada Research and Information Directorate, Bureau of Pension Advocates, Adjudicators, and Veterans Affairs Canada, are completely silent regarding, a 13% solution of the active vesicant agent HT (mustard gas) mixed in the solvent DEP, as being a proven and safe training agent.

This grievance supports and rightfully recognizes Adobe participant's, participation in the evaluation of mustard agent, code-named TA66/1(Y) in 1966. Furthermore, supports their recognition as test subjects, and the authorization of their receiving the award of an *ex-gratia* payment, of \$24,000 in 2004.

This grievance does however, objects to the alleged, discriminatory behaviour towards participants of Exercise Vacuum, who were denied recognition and the award of an *ex-gratia* payment, after being utilized by the Canadian Forces,

and Suffield Experimental Station, in experimental testing, using mustard agent and other lethal chemicals, in 1968.

Therefore, the Department of National Defence, and Government's final decisions pursuant to Vacuum participants, is considered to be defective and is being disputed in this grievance. The Bureau of Pension Advocates, Veterans Affairs Canada, and Adjudicators have verified the legitimacy, of the Research Directorate's evidence, in its representation of that direct evidence, in favourable Disability Pension Entitlement claims, noted in new evidence.

This grievance, is particularly concerned with the following issues, the truth, rule of law, procedural fairness, and legal interpretations. Moreover, the integrity of the applicable standard of a review process, pursuant to compensation for veterans utilized by the Canadian Forces, in Chemical Testing Experiments/Chemical Warfare Experiments, is that of correctness.

SUMMARY:

February 9, 2007 new direct and circumstantial evidence, obtained from the Pension Advocate/Lawyer Jane Michael's, Appeal By Written Submission, clearly negates the testimonies presented by the Director Casualty Support and Administration, and that of the Assistant Deputy Minister (Human Resources-Military). Who denied experimental testing, using mustard agent, while participating in the User Trial/Troop Test code-named Exercise Vacuum, during Regular Force service at Suffield Experimental Station in 1968.

First, case;

"Based on additional information from our Veterans Affairs Canada Research and Information Directorate, the evidence indicates that you could have been exposed to mustard gas or a similar agent, while in the performance of your military duties when experimental testing was being performed at Suffield Experimental Station while participating in Exercise Vacuum during your Regular Force service.

Although there is no medical documentation to show that you suffered respiratory effects as a result of this testing, current medical research suggests that the development of long-term respiratory effects such as chronic bronchitis, may occur in the absence of an acute respiratory response following exposure to mustard agents.

Based on the available evidence and in resolving any doubt in your favour, the Department concludes your Chronic Bronchitis arose out of your Regular Force service."

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Second, case;

"Based on information obtained from the Veterans Affairs Canada Research and Information Directorate, the Department acknowledges your participation in Exercise Vacuum, at the Defence Research Experimental Suffield in 1968. This information indicates that you may have been exposed to mustard agents. Although there is no medical documentation, to show that you suffered any respiratory effects, as a result of this exposure, current medical research suggests that development of long-term respiratory effects, such as chronic obstructive pulmonary disease, may occur in the absence of an acute respiratory response following exposure to mustard agents.

As the evidence indicates that an association exists between a past exposure to mustard agents, and the development of your type of respiratory condition, the Department resolves any doubt in your favour, and concludes that your Chronic Obstructive Pulmonary Disease arose out of your Regular Force service.

The Department, therefore, grants disability pension entitlement under subsection 21(2) of the Pension Act."

The validity of Veterans Affairs Canada Research and Information Directorate's evidence in 2005, is uncontestable and provides legitimate evidence, attesting too experimental testing, using mustard agent during the user trial codenamed Exercise Vacuum, in 1968. Providing causation, during Regular Force service, which belies the alleged errors in fact and law, propagated by the Department of National Defence, and Government of Canada throughout 2004/2006.

Suffield Report No. 250 corroborates the Canadian Forces, and Suffield Experimental Station, utilized 681 soldiers from Exercise Vacuum, during Local Trial No. 364. In which soldiers, were directed by the Canadian Forces, and Suffield Experimental Station, to crawl throughout a 500-meter field, contaminated by means of agricultural sprayers, with a 13% solution of the active vesicant agent HT (mustard gas), mixed in the solvent DEP.

In addition, the Suffield Report reveals the Canadian Forces, and Suffield Experimental Station, conducted further experimental activities, throughout Exercise Vacuum, without advising or obtaining consent from participating veterans. Whereas, the Canadian Forces and Suffield Experimental Station, mixed and heated toxic chemicals, through "Thermal Exhaust Generators." Which directly injected mixed toxic chemicals, into the hot manifold exhaust systems of military jeeps? This relevant evidence was not considered previously, in support of veterans Regular Force service claims, of being exposed to dangerous toxic substances.

"During combustion, both chemicals involved produce toxic smoke. CS generates hydrogen cyanide, while MeC12 (methylene chloride) generates hydrogen chloride and chlorine. Both give copious amounts of carbon monoxide."

November 20, 2005 the Director Casualty Support and Administration, specifically stated in correspondence, and;

"Research on the other hand involves, by its very nature, investigations into realms for which knowledge may not exist and often involves an element of risk that is not entirely predictable. It is within this context that the mandate of the Chemical Warfare Agent Testing Recognition Program was defined to recognize those soldiers that took part in experimental activities, but not training."

Chemicals used during Exercise Vacuum in 1968, were later identified in the Pension Advocate Jane Michael's, 2007 Appeal By Written Submission stating, and;

"At the time, the toxic nature of many of the chemicals used was significantly underestimated, and that is verified in the attached updated report from the Department of National Defence (EA-C4) which lists the training agents (p. 3 of report) used in Exercise Vacuum and provides toxicity assessment done in 1968 at the time of the Exercise, and an updated toxicity assessment in 1999. The Board will note without question that the toxic effects of the majority of these chemicals were found in 1999 to be much more potent and dangerous, than what they were thought to be when used in Exercise Vacuum in 1968."

Allegedly, in error of fact and law, the Department of National Defence, offered a much less ominous description of the dangerous and toxic chemicals, used or created, during the user trial code-named Exercise Vacuum, by incorrectly stating and;

"Throughout Exercise Vacuum, most participants were exposed to "CS" tear gas. This and other chemical warfare training agents used in the exercise helped create realistic battle conditions, but without the toxic effects of chemical agents that would be used in wartime."

November 20, 2005 correspondence stemming from the Director Casualty Support and Administration is found to be in discord with direct evidence, provided by Veterans Affairs Canada Research and Information Directorate. The (DCSA) allegedly, in error of fact and law testified, and;

"As requested in your letter dated 24 June 2005, a first-level review of your Chemical Warfare Agent Testing Recognition Program application has been completed. Exercise Vacuum, as part of a series of activities that started early in the 1960s, was conducted in order that the Canadian Forces could study the requirements for chemical warfare Defence. It is considered to be a training event specifically because there were no chemical warfare agents tested nor were soldiers used as human subjects in any experiment using chemical warfare agents, during the course of the Exercise.

Prior to the exercise, the staff of the Canadian Forces Nuclear, Biological and Chemical School were tasked to write the necessary chemical warfare procedures and drills required for Exercise Vacuum and they then trained unit instructors in chemical

warfare at the units' home stations. Units selected to participate in Exercise Vacuum, undertook refresher training before they deployed to Suffield. Additionally, the first 10 days of Exercise Vacuum were allocated to the conduct for the demands of this exercise.

There is no doubt that the troops participating were contaminated during the course of the training exercise, as this would represent the reality of chemical warfare. By the time that Exercise Vacuum took place, training agent TA66/1(Y) was proven to be a safe and effective training agent and its use in the context of a training exercise, did not present a risk, that exceeded that which a trained professional, would be expected to encounter in the exercise of his duties.

While many training activities involve an element of risk, training should involve no more risk to the subject, than what can be reasonably expected in the exercise of their profession, as long as the required safety precautions are respected. Research on the other hand involves, by its very nature, investigations into realms for which knowledge may not exist, and often involves an element of risk that was not entirely predicable.

It is within this context, that the mandate of the Chemical Warfare Agent Testing Recognition Program, was defined to recognize those soldiers that took part in experimental activities."

November 23, 2005 correspondence stemming from the Assistant Deputy Minister (Human Resources-Military) is found to be in discord with direct evidence, provided by Veterans Affairs Canada Research and Information Directorate. The (ADM) allegedly, in error of fact and law testified, and;

"I have carefully considered your request of 9 May 2005, for a second-level review of the initial decision to deny your application for an ex-gratia payment under the Chemical Warfare Agent Testing Recognition Program. Exercise Vacuum consisted of three phases, and at no time during any phase of this exercise were chemical warfare agents used for experimental purposes. Phase One of the exercise was familiarization and training in Suffield and lasted seven days.

This phase ended with some soldiers, dressed in full protective gear, crawling through a field contaminated with TA66/1(Y), a 13 percent solution of mustard gas dissolved in diethyl phthalate to which a fluorescent dye had been added. TA66/1(Y) was used for the purpose of instilling confidence in the troops, with respect to their equipment and battle drills.

Throughout Exercise Vacuum, most participants were exposed to "CS" tear gas. This and other chemical warfare training agents used in the exercise helped create realistic battle condition, but without the toxic effects of chemical agents that would be used in wartime.

The Chemical Warfare Agent Testing Recognition Program was established by the Government of Canada to recognize the exceptional efforts of those Suffield and Ottawa-based Veterans who were chemical warfare agent test subjects. The Program was not designed to compensate those Veterans who may have been exposed to chemical warfare training agents during routine training or in the normal course of their duties. On this basis your appeal must be denied."

The following testimony was obtained from the Pension Advocate/Lawyer Jane Michael's, Appeal By Written Submission, dated February 9, 2007. This evidence, clearly establishes the true purpose, of the user trial code-named Exercise Vacuum, and legitimizes the direct evidence, of experimental testing, using mustard agent, and other lethal chemicals, during the User Trial/Troop Test code-named Exercise Vacuum, in 1968. Stating and;

"Rather than a simple simulation exercise, Exercise Vacuum involved the use of real toxic chemicals, the true purpose of the Exercise being to evaluate the effectiveness of the protective clothing and equipment, and to also evaluate the reaction of troops in a real life exposure to toxic substance.

The Department, since the date of the Appellant's Decision, has dramatically changed its approach based on new information brought to its attention. That dramatic change is that the Department no longer denies claims to individuals who took part in chemical warfare testing at Suffield in exercises such as Exercise Vacuum. The new Department policy now recognizes the exposure to mustard gas and other toxic substances dose not necessarily cause any symptomatology at the time of exposure, and that long-term lung damage can evolve many years after the exposure.

The Department also recognizes that the very fact that soldiers were exposed to mustard gas and other such lethal chemicals is enough to create a reasonable doubt that their chronic lung disease diagnosed many years later, resulted from that exposure."

REQUEST:

That reconsideration, on the basis of alleged, errors in fact and law, be given in this particular case. Whereas, new direct evidence provided by Veterans Affairs Canada Research and Information Directorate in 2005, unquestionably corroborates, the Canadian Forces and Suffield Experimental Station, utilized 681 soldiers, from the user trial/troop test code-named Exercise Vacuum, as test subjects during experimental testing. Using an active vesicant agent HT (mustard gas) code-named TA66/1(Y), during Local Trial No. 364, at Suffield Experimental Station in 1968.

In Addition, the Canadian Forces and Suffield Experimental Station, conducted further experimental activities. Involving the mixing, and heating of toxic

chemicals, through "Thermal Exhaust Generators," which directly injected toxic chemicals, into the hot manifold exhaust system of military jeeps. During the combustion or burning process, created other "much more potent and dangerous," toxic vapours and smokes, that were purposely dispersed amongst troops, without prior notification, or consent.

HISTORY:

"In 1966, A Company learned a new word – "erythema". It all started when the Defence Research Board people at the Suffield Experimental Station undertook the development of a new gas for Chemical Warfare (CW) training in the Canadian Armed Forces. After years of work, lab test, and experiments, TA66/1 emerged. The new agent is designed to produce a sunburn-like reaction, known to medical types as erythema on the skin of people who are contaminated.

By the fall of 1966, it was ready except for one thing: it had to be tested on troops under tactical conditions. We were to be the guinea pigs for this final test. This brings up the tale of Exercise Spot Check V and Project Adobe.

The results of the Spot Check series of trials (1) and Project Adobe (2) led CFHQ to conclude that chemical warfare protective drills and procedures, provided for the Canadian Armed Forces, as well as certain items of protective equipment, were inadequate. Accordingly, in 1967, CW drills and standing operation procedures (SOPs) were revised and some equipment was declared obsolete."

Mustard Agent Used During Operation Spot Check:

"Based on additional information from our Research Department, the evidence indicates that you were a participant in the experimental tests known as FE 540 and Operation Spot Check. This evidence indicates that you would have been exposed to Mustard gas, or a similar toxic substance, while in the performance of your military duties when experimental field-testing was being performed at SES. As current medical research suggests that a causal relationship exists between mustard agent exposure and the development of long-term chronic lung conditions, which can occur many years following exposure to mustard agents.

The Department, therefore, resolves any doubt in your favour and concludes that your condition of Chronic Obstructive Lung Disease with Small Airway Asthma arose out of your Regular Force service and grants disability pension entitlement under subsection 21(2) of the Pension Act."

In 1968, the 1st Battalion Queen's Own Rifles of Canada, under command of LCol H. C. Pitts MC, CD was directed by 1 Combat Group Calgary, Alberta to partake in the user trial/troop test, code-named Exercise Vacuum. It is considered to be the largest chemical warfare operation, ever taken place in the western hemisphere,

using more than 60,000 lbs., or 30 tons of toxic chemicals, at Suffield Experimental Station Ralston, Alberta in 1968.

Background and Concept of Exercise Vacuum:

"Exercise Vacuum is a code word for the user trial (troop test) conducted at the Defence Research Establishment Suffield (DRES) Ralston, Alberta during the period 17 September-05 October 1968.

Exercise Vacuum in Suffield, Alberta was designed to test Canada's drills and equipment against chemical attack and also, to determine if we could continue to fight effectively in a chemical warfare environment. The Battalion was considerably reorganized for this concentration, as a British company from the Black Watch and an American company from 2/61 Infantry Battalion became our B and C Companies.

The results of such an exercise would also contribute to the development of new SOPs, as required, indicate deficiencies in new or existing equipment and provide basic data from which equipment objectives and requirements could be written. The exercise was given top priority and an organization under a Project Scientist was set up as shown in Annex A to coordinate the various activities.

During the special chemical warfare trials, three distinct trials were conducted. One of the trials involved most of the Battalion crawling through a field of mustard gas. The trial was a complete success and proved most interesting. CSM Pete Mitchell was very popular with the scientists as he was unfortunate enough to develop a real blister on his hand.

DR. W. C. Stewart who was responsible for the general development and testing of training agents, and through the Surgeon General Canadian Forces, for establishing safety regulations for their use, and Major A. A. Alexander, Canadian Forces Liaison Officer. The description provided by DREO of the development of chemical detectors and overgarments used by the Canadian troops, is also acknowledge.

The documentation clearing the use of these training agents by the Surgeon General is given in Annex D.

The training agent TA66/1(Y) which consisted of 13% of HT (60 parts 492,2'dichlorodiethyl sulphide), 40 parts T724 (2,2'di(8 chloroethylthio) diethyl ether)) in DEP (diethyl phthalate) and which was approved for use in Exercise Adobe, was used on one occasion during Exercise Vacuum. On completion of Phase 1 all troops traversed prairie terrain contaminated with the agent to a density of 4 g/m2.

The Agent TA66/1(Y) for Vacuum will be prepared by DRES Munitions Group, by methods similar to those used previously in Project Adobe. The concentration of agent HT will be the same, i.e. 13% HT in solvent DEP. However, instead of Arctic White, 1%

of Kiton yellow FF (Ciba Co. Ltd., Dorval, Quebec) will be added as a fluorescent tracer. This change is made to allow the agent to be distinguishable from common laundry detergent whiteners on ultraviolet examination."

Procedure To Be Used In Local Trial No. 364:

"The purpose of Local Trial 364 is to provide an area of ground contaminated with a diluted vesicant agent, for use by the Canadian Forces at the conclusion of the training phase of Exercise Vacuum. (Day 7 of Phase 1).

This diluted vesicant agent was used in Project Adobe, to contaminate an area of ground in which a military exercise was conducted. The agent imposes a small but real Vapour and contact hazard, which enforces realistic precautions; and also affords a means of assessing the importance of shortcomings in defensive measures. Knowledge that a physiologically active agent is present provides motivation, which ensures consistent performance of anti-gas drills.

The military exercise will be planned separately, within the restrictions imposed by the necessary safety precautions. The agent TA66/1(Y) for Vacuum will be prepared by DRES Munitions Group, by methods similar to those used previously in Project Adobe. The concentration of agent HT will be the same, i. e. 13% HT in the solvent DEP. After the agent is mixed, some additional assurance that the material is in fact of the specified identity and concentration is required for safety, before troops are exposed to it. A chemical analysis of a sample of the bulk material should be completed to the satisfaction of H/Munitions before the agent is used.

The area to be used for the trial will be that used in Project Adobe, i. e., within the "mile square" on the DRES range. The areas to be contaminated within the mile square will be selected, and marked, prior to the exercise. Two areas, each approximately 500 meters square, will be contaminated by means of agricultural sprayers, to a ground contaminations density of 4 grams/m2.

For safety, troops to be exposed to this agent will be trained in Defence against Vapour and pickup of liquid, and in personal decontamination. They will also receive a special briefing on the danger of the agent to the eyes."

As previously stated, the Canadian Forces and Suffield Experimental Station in 1968, utilized participants from the user trial/troop test code-named Exercise Vacuum, in further experimental activities, as unwitting test subjects.

The totality and toxicities, causal to these unproven experimental activities, have never been revealed to veterans, nor were they considered previously, during the review process, in support of veterans Regular Force service claims. Of being exposed to dangerous toxic substances, while participating in the user trial Vacuum.

Chemicals Mixed And Heated Into Toxic Vapour & Smoke:

Military Code-names. Actual Chemicals.

TAHC: 10% CS in TBP – Liquid and Vapour

TAME: 5% CS in methylene chloride (MeC12) Vapour

TAPU: Butylmercaptan in methylene chloride (MeC12) Vapour TAAA: Amyl Acetate in methylene chloride (MeC12) Vapour

My personal research, only pertains to the toxic chemicals 'O Chlorobenzylidene Malononitrile' (commonly known as "CS"), and 'Methylene Chloride' (commonly known as "MeC12"), which were mixed and heated into dangerous, toxic vapours and smokes, by the Canadian Forces and Suffield Experimental Station, throughout the user trial code-named Exercise Vacuum in 1968.

Taken From Mr. Eric R. Larsen, Ph. D. (Declaration)
[CTRL] Brown v. The United States: Waco & Cyanide (fed)
Dated October 31, 1999

Mr. Eric R. Larsen, Ph. D., was asked to render an opinion on the probable effects of the gas injections, into the Davidian residence at Mt. Carmel, outside Waco Texas stating, and;

"CS is a high-melting flammable solid (dust) whose sole use is as a "tear gas." Its effects are not limited to eye irritation and tearing, however. At 1-5 parts per million it produces eye irritation and a copious flow of tears. At concentration of 12-20 ppm it attacks the respiratory tract and causes difficulty in breathing. In the respiratory tract or on moist skin it causes a chemical burn similar to sunburn and can be classed as a vesicant, similar to "mustard gas."

The CS was introduced dissolved in methylene chloride. MeC12 is a small, highly volatile chlorinated hydrocarbon commonly used as a solvent. This compound is flammable in a Vapour concentration greater than 12-14%; it is generally considered nonflammable so long as it is used in well-ventilated areas or in open air. Like all small oil soluble compounds inhalation of its Vapour's causes "narcosis" or what is commonly called "anesthesia".

The narcotic effects of MeC12 would follow similar patterns. Anyone caught in the spray itself would experience tachycardia and possibly cardiac arrest. MeC12 is known to sensitize the heart, particularly if the person is already under stress or fearful. The MeC12, being a potent anesthetic agent, would tend to alleviate the pain as narcosis set in and the brain began to shut down. In lay terms, MeC12 is a very potent, fast – acting inhalation general anesthesia- agent nearly on a par with Halothane, the most potent agent currently used in surgical anesthesia.

During combustion, both chemicals involved produce toxic smoke. CS generates Hydrogen Cyanide, while MeC12 generates Hydrogen Chloride and Chlorine. Both give copious amounts of carbon monoxide. The manufacturers of these materials warn of risks of toxicity and fire in their MSDS's."

BREIF HISTORY OF MY SERVICE:

In 1966, I was a member of the Queen's Own Rifles Depot, located at CFB Currie Barracks Calgary, Alberta. In order to complete my formal military basic training. The 2nd Battalion Queen's Own Rifles of Canada was also based at CFB Currie Barracks. On a Friday morning in 1966, both Depot trainees, and Regular Force Battalion members, were formed on their respective sides of the parade square, for the Commanding Officer's Friday morning inspection.

At the conclusion of the Commanding Officer's parade, LCol Anderson stated A- Company, would be participating in Project Adobe, at Suffield Experimental Station Ralston, Alberta. On completion of my basic military training, I remained with the 2nd Battalion Queen's Own Rifles of Canada, at CFB Currie Barracks Calgary, Alberta. Later serving in a Special Duty Area (Cyprus) in 1967, after which I was posted to the 1st Battalion Queen's Own Rifles of Canada, located in Victoria B.C.

In 1968, LCol H. C. Pitts MC, CD commanding officer, of the 1st Battalion Queen's Own Rifles of Canada, informed the Battalion of its up coming participation in Exercise Vacuum, at Suffield Experimental Station Ralston, Alberta from September 17, until October 05 1968, in which I participated.

In 1970, I again served in a Special Duty Area (Cyprus), with the 1st Battalion Queen's Own Rifles of Canada. Shortly thereafter, the Canadian Government completely disbanded, the Queen's Own Rifles of Canada. I however, remained at CFB Work Point Barracks, Victoria British Columbia, after re-badging to the 3rd Battalion PPCLI. In 1990, I was medically released from the Canadian Forces, under the direction of the Canadian Forces Surgeon General.

NEW EVIDENCE:

Participants of the user trial code-named Exercise Vacuum, were previously refused the *ex-gratia* payment, recognition as test subjects, and pension disability benefits on the following basis. The Government of Canada, and Department of National Defence, in error of fact and law, asserted incorrectly through correspondence, the user trial code-named Exercise Vacuum, was stated to be and;

"It is considered to be a training event, specifically because, there were no chemical warfare agents tested, nor were soldiers used as human subjects, in any experiment using chemical warfare agents, during the course of the Exercise."

Direct evidence from the Suffield Report No. 250, however repudiates the term training event, used to describe Vacuum, stating and;

"These exercises were not exercises by definition, according to the draft glossary of terms for OR workers, since their purpose was not training, although training was one of the several beneficial by-products. They were of two types. The first, which by definition comprised a Field Experiment and consist of a series of studies referred to as the SPOT CHECK series, were designed by the staff of DRES, with military input, to identify and quantitate the significant hazards that exist for troops operating in the chemical environment produced by spray attacks. They were carried out in the type of bush terrain shown in Figure 1.

The second, consisting of two troop or user trials called Adobe and Vacuum, were designed by the Canadian Forces, with DRES assistance, to define the practicability of the Defensive procedures developed to counteract chemical hazards. They were carried out on the open prairie of the DRES range area."

June 30, 2005 - Director Casualty Support and Administration, "please note that TA66/1(Y) was tested on Project Adobe and therefore test subjects who partook in Adobe are deemed to be eligible to receive the ex-gratia payment."

June 2005 – "Based on additional information from our Veterans Affairs Canada Research and Information Directorate, the evidence indicates that you could have been exposed to mustard gas or a similar agent, while in the performance of your military duties when experimental testing was being performed at Suffield Experimental Station, while participating in Exercise Vacuum during your Regular Force service."

July 2005 – "Veterans Affairs Canada Research and Information Directorate, the Department acknowledges your participation in Exercise Vacuum at the Defence Research Experimental Suffield in 1968. This information indicates that you may have been exposed to mustard agents."

August 29, 2005 - The Honorable Gary V. Lunn, LL.B., M.P. Saanich –Gulf Islands, to the Honourable Bill Graham Minister of National Defence. "The exercise which took place in 1968 under the name "Exercise Vacuum", exposed soldiers to a variety of toxins, including mustard gas, that had been diluted in diethyl phosphate. It is clear that mustard gas is a chemical warfare agent, and any exposure as a result of military service should be treaded with seriousness, regardless of the circumstances of that exposure.

How does his exposure differ from that suffered by participants in the testing program in terms of severity? What assurances existed based on earlier knowledge of the effects of mustard gas that the dosage used in Exercise Vacuum, would not result in serious illness or long-term disability?"

November 20, 2005 - The Director Casualty Support and Administration, "there is no doubt that the troops participating were contaminated during the course of the training exercise, as this would represent the reality of chemical warfare."

February 9, 2007 - The Pension Advocate/Lawyer Jane Michael states," in addition to all of the evidence and arguments concerning what really was involved in Exercise Vacuum, which can now be stated without question, based on the extensive report submitted to the Board that rather than a simple simulation exercise. Exercise Vacuum involved the use of real toxic chemicals, the true purpose of the Exercise being to evaluate the effectiveness of the protective clothing and equipment, and to also evaluate the reaction of troops in a real life exposure to toxic substances.

At the time, the toxic nature of many of the chemicals used was significantly underestimated, and that is verified in the attached updated report from the Department of National Defence (EA-C4) which lists the training agents (p. 3 of report) used in Exercise Vacuum and provides toxicity assessment done in 1968, at the time of the Exercise, and an updated toxicity assessment in 1999. The Board will note without question that the toxic effects of the majority of these chemicals were found in 1999 to be much more potent and dangerous than what they were thought to be when used in Exercise Vacuum in 1968.

The new Department policy now recognizes that exposure to Mustard gas and other toxic substances does not necessarily cause any symptomatology at the time of the exposure, and that long-term lung damage can evolve many years after that exposure. The Department also recognizes that the very fact that soldiers were exposed to mustard gas and other such lethal chemicals is enough to create a reasonable doubt that their chronic lung disease diagnosed many years later resulted from that exposure.

The Appeal Board cannot ignore this radical change in approach and policy, and the Appeal Board cannot allow the injustice and the unfairness to continue to be perpetrated for individuals such as the Appellant who had the unfortunate timing of having applied for their Disability Pensions prior to the Department obtaining critical information which would have no doubt resulted in a favourable decision had the Department had that information prior to adjudicating their claim.

It is our submission that the Board not only has the authority, but it indeed has the obligation, both legally and morally, to give full weight to the change in Departmental policy and to apply that policy to the Appellant's claim and award him full pension in the same manner as the three individuals brought to the Board's attention received favourable rulings. The Board also should be aware that these are but three examples that have come to the Bureau's attention, and there are no doubt many other individuals whose claims have come forward since the Department acquired the new information."

ERRORS IN FACT and LAW:

It is a breach of procedural fairness, for the Government of Canada, and the Department of National Defence, to invent an understanding, or to arrive at that

understanding without qualification, and to rely on that unexplained understanding, without at least some basis and expertise, for that understanding. The Government, and the Department of National Defence's, understanding in this case, are clearly in discord with other literature, relied on by Veterans Affairs Canada Research and Information Directorate, Bureau of Pension Advocates, and Adjudicators, as noted in the Disability Pension Entitlement claims, presented in this grievance.

In this regard, the Canadian Government and Department of National Defence, relied on understandings from unstated evidence, that the user trial codenamed Exercise Vacuum, <u>did not utilized soldiers</u> in any experimental testing, using mustard agent, code-named TA66/1(Y). Moreover, allegedly erred in fact and law, by misusing the term <u>training agent</u>, to diminish the toxic effects of an active chemical warfare agent, HT (mustard gas) and other toxic chemicals, identified in 1999, as being much more potent and dangerous, in the updated 1999 toxicity assessment.

July 19, 2005 - Dear Mr. Towers – "Your Chemical Warfare Agent Testing Recognition Program application form has been reviewed; unfortunately, the service you have claimed does not meet the criteria for the award of an ex-gratia payment under this program's guidelines. This office has noted the information that you sent in regards to Exercise Vacuum.

On your application you have stated that you served in Suffield in 1968 and it is demonstrated on your Unit Employment Record that you participated on Exercise Vacuum as a member of the 1st Battalion, The Queen's Own Rifles of Canada. While this exercise took place at the Defence Research Establishment Suffield from 16 September to 06 October 1968, overall it is deemed to be a training event and not a field trial of chemical warfare agents. Exercise participants (including umpires, observers and recorders) are therefore, not judged to be chemical warfare agent test subjects."

March 2005 - Director Casualty Support and Administration, "the comments on exercise Vacuum that you put forward in your letter are acknowledged. However, it should be noted that according to information provided by Defence R&D Canada, the only chemical warfare agent used during Exercise Vacuum, was mustard gas, TA66/1(Y), and it was diluted so that it could be safely used as a training agent.

As the Program Manager stated in the letter dated 11 January 2005, Exercise Vacuum was a training event and not a field trial of chemical warfare agents. As long as safety precautions are in place-as was the case on Exercise Vacuum-training should involve no more risk to the subjects than what can be reasonably expected in the exercise of their profession. Participants of Exercise Vacuum therefore, are not deemed to be chemical warfare agent test subjects. On this basis your appeal must be denied."

June 30, 2005 - the Director Casualty Support and Administration, "because chemical warfare agents were not tested, Exercise Vacuum is therefore deemed to be a training event. Participants (including umpires, observers and recorders) of Exercise Vacuum

are not considered to be chemical warfare agent test subjects. On this basis your appeal must be denied.

While your military service is highly regarded, the Chemical Warfare Agent Testing Recognition Program was established by the Government of Canada to acknowledge the exceptional service of Suffield and Ottawa-based chemical warfare agent test subjects only, and not to compensate all Veterans who may have been exposed to chemical warfare agents."

November 20, 2005 - The Director Casualty Support and Administration, "the situation in which the troops crawled across a field contaminated with the chemical warfare training agent, TA66/1(Y), meets the definition of training.

There is no doubt that the troops participating were contaminated during the course of the training exercise, as this would represent the reality of chemical warfare. Under these conditions, and to meet the aims of the exercise that included "test, evaluate and develop chemical warfare drills and procedures" it was essential that all participants properly observe the correct methods of wearing protective equipment and conduct through decontamination procedures regardless of the fact that the training agents used would not normally cause any long-term ill effects.

By the time that Exercise Vacuum took place, training agent TA66/1(Y) was proven to be a safe and effective training agent and its use in the context of a training exercise did not present a risk."

November 23, 2005 - The Assistant Deputy Minister (Human Resources-Military), "at no time during any phase of this exercise were chemical warfare agents used for experimental purposes. Some soldiers, dressed in full protective gear, crawling through a field contaminated with TA66/1(Y) a 13% solution of mustard gas dissolved in diethyl phthalate to which a fluorescent dye had been added). TA66/1(Y) was used for the purpose of instilling confidence in the troops with respect to their equipment and battle drills."

SUMMARIZE:

Veterans Affairs Canada Research and Information Directorate, Veterans Affairs Canada, Bureau of Pension Advocates, and Adjudicators have legitimately established the following and:

"The evidence indicates you could have been exposed to mustard agent, or a similar agent, while in the performance of military duties, when experimental testing was being performed at Suffield Experimental Station, during Exercise Vacuum in 1968."

Fact, once again neither medical, scientific, or the above mentioned federal agencies, endorsed or supported, the Canadian Government's, or Department of National Defence's claims, that a 13% solution of the active vesicant agent HT

(mustard gas), mixed in the solvent DEP, code-named TA66/1(Y), was proven to be a safe training agent.

The Research Directorate's 2005 direct evidence, as noted in Disability Pension Entitlement Decisions, presented in this grievance, legitimately concedes experimental testing, using mustard agent, took place during Exercise Vacuum, at Suffield Experimental Station in 1968.

Department of National Defence, and Canadian Governments lack of candor regarding the official findings of the updated 1999 toxicity assessment, and the Research Directorate's, direct evidence of 2005, speaks volumes as to the lack of integrity of the review process. The Department of National Defence is directly responsible for utilizing 681 soldiers from Vacuum, as test subjects, during experimental testing, using mustard agent, and other lethal chemicals, during Local Trial No. 364, and the user trial/troop test code-named Exercise Vacuum, at Suffield Experimental Station Ralston, Alberta in 1968.

The alleged errors in fact and law, and the *inadvertence* of direct evidence, by the Department of National Defence, and Government of Canada throughout 2004/2006, are causal to the impediment of Vacuum veterans, being denied legitimate recognition as test subjects, compensation by way of an *ex-gratia* payment, and pension disability benefits. After being utilized by the Canadian Forces, in Chemical Testing Experiments using mustard agent, and other lethal agents, at Suffield Experimental Station Ralston, Alberta in 1968.

NATIONAL DEFENCE STATEMENT:

"This initiative is all about recognition for Canada's chemical test veterans and the payment is only one form of recognition among the two others, that being pension disability benefits if they are entitled to them and finally the aspect of recognition and payment.

To qualify you must meet the following simple criteria, you must have served as a member of the Canadian military and volunteered to be a human test subject in chemical warfare experiments at Suffield, Alberta from 1941 to the mid 1970s."

VETERANS AFFAIRS CANADA STATEMENT:

"The Department of Veterans Affairs Canada, also recognizes that the very fact the soldiers were exposed to Mustard gas and other such lethal chemicals, is enough to create a reasonable doubt that their chronic lung disease diagnosed many years later resulted from that exposure."

RELIEF SOUGHT:

Exercise Vacuum veterans ask that Reconsideration, for recognition, the award of an *ex-gratia* payment, and pension disability benefits be granted on the basis, that:

- 1. There is significant new direct evidence, attesting to experimental testing; using mustard agent, and other lethal chemicals, described as being "much more potent, and dangerous than what they were thought to be when used when used in Exercise Vacuum in 1968".
- 2. The Federal Government of Canada, and Department of National Defence, allegedly erred in fact and law, by applying unsupported, and contradictory conclusions of science, that was beyond its expertise.
- 3. The Federal Government of Canada, and Department of National Defence, allegedly erred in fact and law, as it relates to procedural fairness, by misquoting the state of scientific knowledge, in that it falsified, or altered the statutory description of mustard agent incorrectly, to a proven and safe training agent. In addition, ignored its own previously established precedent in 2004, pursuant to a 13% solution of the active vesicant agent HT (mustard gas) mixed in the solvent DEP, as it relates to Project Adobe participants.
- 4. The Federal Government of Canada, and Department of National Defence according to direct evidence, were prejudiced, and acted with discriminatory behaviour, against Vacuum veterans.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

James T. Towers CD (Sgt. Retired)

As requested by,

Major General H. C. Pitts MC, CD. (Deceased)

cc: The Honourable Alex Ruff, MSC, CD.

Mr. Anthony Saez, CEO Bureau of Pension Advocates.

Veterans Affairs Canada Research Directorate

Queen's Own Rifles Association, Vancouver Island Branch