

# **Environmental Tobacco Smoke (ETS) Ventilation and the BC Hospitality Sector: Best Practices Forum**

## **An Executive Summary**



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## **Introduction**

On April 15, 2003, more than forty representatives from BC's Hospitality Industry gathered in Burnaby, BC, to attend a "best practices forum" on environmental tobacco smoke (ETS) ventilation and the Hospitality Sector. The forum, hosted by the Coalition of Hospitality Organizations (COHO) and the Workers' Compensation Board of British Columbia (WCB), brought together a diverse group of ventilation contractors, hospitality owners and operators, and WCB representatives—all dedicated to sharing information about the installation of ventilation systems and compliance with the WCB's ETS Regulation.

The half-day event provided practical, common-sense solutions for bar, pub, and restaurant owners interested in setting up designated smoking rooms within their establishments. It also served as a recognition of the partnership between the WCB and the Hospitality Industry, illustrating what can be accomplished when organizations work together to achieve a common goal.

### **The Speakers**

At the forum there were, essentially, three types of speakers:

- Contractors (who provided practical information about ventilation systems and how they can be incorporated into smoking rooms)
- Operators (who told stories about how they complied with the Regulation)
- An employee (who explained how the ETS Regulation has impacted his life)

### **The Key Issues**

During the morning, three key messages emerged. First, the COHO and the WCB have forged a new relationship of cooperation and conciliation that has produced a good workable ETS Regulation. Second, when it comes to setting up a designated smoking room there are numerous options. The key is to find the right ventilation solution for an individual establishment. And third, no hospitality owner or operator is alone in this venture. The WCB is ready and willing to work with each individual to find a solution that meets the ETS Regulation.

## **A Brief History of the ETS Regulation**

On January 1, 2000, the WCB implemented the first ETS Regulation, essentially banning smoking in public buildings across the province. The Regulation was not well received by the Hospitality Industry which felt the new anti-smoking laws were hazardous to the economic health of BC's pubs, bars, and restaurants. After much debate, a coalition of hospitality business owners asked the government to lift the ban, arguing it threatened their livelihoods.

It was a very acrimonious time. Ultimately, the Hospitality Industry took the WCB to court and 80 days later the BC Supreme Court threw out the ban. In response, the WCB and the Hospitality Industry began to work together to come up with a new solution.

Approximately one year ago, the WCB brought in a revised Regulation that gave business owners in the Hospitality Industry the option of either banning smoking or moving smokers into an adequately ventilated smoking room. Since that time, the COHO and the WCB have been working together to find practical ways to work with the Regulation.

## Participants

### Moderator

Roberta Ellis, Vice President, Prevention, WCB

### Speakers

- Vance Campbell, Coalition of Hospitality Organizations  
*Introduction: "From Conflict to Cooperation"*
- Doug Enns, Chair, WCB Board of Directors  
*Building Partnerships: The WCB Yesterday, Today, and Tomorrow*
- Gord Boyes, Contractor, Air-Temp Energy System  
*Make-Up Air: What it is and Why you need it*
- Erwin Walko, Owner, Comfort Agencies  
*Ventilation Systems: Keeping it Simple*
- David Jones, Manager, Connections Cabaret, Holiday Inn Metrotown  
*Building A Designated Smoking Room: A Success Story*
- Sig Jantzen, Sanuvox  
*UV Air Purifiers: New Technologies*
- Sam Kastagner, Manager, Royal Canadian Legion  
*Operator's Story: Dealing with the New Regulation*
- Elia Sterling, President of Theodor Sterling Associates Ltd.  
*New 3M Technologies*
- Milford Crocker, Manager, ATI AirTest Technologies  
*CO<sub>2</sub> Sensors: Cost-Effective Technology*
- Cory Cummings, Bar Manager, Rhino's Pub & Grill, Coquitlam, BC  
*Staff Perspective: The Challenges, Experiences, and Results*

### Conference Organizer

Tim Crowhurst, Sea Level Communications

## Quotes and Observations from the Best Practices Forum

“We recognize the need for a level playing field.”

*Roberta Ellis, Vice President, Prevention, WCB*

“That was then and this is now.”

*Vance Campbell, Coalition of Hospitality Organizations*

“When we take industry views into account, we end up with a better solution.”

*Doug Enns, Chair, WCB Board of Directors*

“You don’t have to spend a lot [to create a designated smoking room].”

*David Jones, Manager, Connections Cabaret*

“Working with the WCB has been good. Now, we’re all in a clean, smoke-free environment.”

*Sam Kastagner, Manager, Royal Canadian Legion*

“New innovative products will allow you to meet the regulations, be energy efficient, and ensure the health of your staff and patrons.”

*Elia Sterling, President, Theodor Sterling Associates*

“CO<sub>2</sub> sensors can enhance your savings potential.”

*Milford Crocker, Manager, ATI AirTest Technologies*

“I don’t come home smelling like an ashtray.”

*Cory Cummings, Bar Manager, Rhino's Pub & Grill*

“This is the beginning of a beautiful friendship.”

*Roberta Ellis, Vice President, Prevention, WCB*

## Summary of Presentations

### **Roberta Ellis, Vice President, Prevention, WCB**

Roberta Ellis kicked off the forum by welcoming guests from both the Hospitality Industry and the WCB, and praising their cooperation. “This is a historic moment,” said Ellis, “the Hospitality Sector and the WCB working cooperatively together.”

“WorkSafe is built on consulting and educating and ensuring compliance.” That spirit of cooperation is what brought the WCB and the Hospitality Industry here today, said Ellis.

“We consulted and worked together to develop ground rules. And now, at this forum, we will look at ETS case studies from operators, staff, and contractors—and practical ways to make ventilation a part of your business.”

## **Vance Campbell, Coalition of Hospitality Organizations**

### *Introduction: "From Conflict to Cooperation"*

Vance Campbell, an advocate for the Hospitality Industry, opened the forum by speaking about the relationship between the WCB and the Hospitality Industry.

Historically, said Campbell, it has been an antagonistic relationship. In fact, when the WCB first introduced the province-wide smoking ban, the Hospitality Industry was outraged. Campbell recalled a statement he made at the time: "The WCB has destroyed its credibility with the Hospitality Industry."

"That was then and this is now," said Campbell. "The relationship has gone from one of acrimony and distrust to a cooperative partnership. After five or six years of battling an emotional issue, we've shown we can come up with a solution that protects the health of BC's workers, yet allows businesses to remain profitable."

"This is a real turnaround," said Campbell. "And today I am pleased and honored to be co-chairing this forum with Roberta Ellis of the WCB."

## **Doug Enns, Chair, WCB Board of Directors**

### *Building Partnerships: The WCB Yesterday, Today, and Tomorrow*

Doug Enns, the new chair of the WCB's Board of Directors, welcomed guests to the forum, then gave them an overview of the WCB and where it is headed. Here are some highlights of his speech:

### *Introduction*

We are here today to talk not about Health and Safety, but about partnerships and what can be accomplished when we work together.

### *The Revised ETS Regulation*

The science now says the correct decisions were made. Significant strides have been taken. When we take industry views into account, we end up with a better solution.

### *About the WCB*

The WCB has a broad mandate. We need to become more responsible and accountable to our stakeholders.

The system in BC is one of the best funded in the world. We have \$8 billion in funds to meet potential claims that may come our way. We think we've got a good base to build on.

We win best when we have fewer customers. That is, fewer claimants. Improved health and safety and a reduction in workplace injuries will benefit everyone in the province.

### *The Future*

We need to gain a better understanding of where our stakeholders want us to go. We are working with businesses to get assessment rates down. We are working to find new ways to deal with workers who come to us with injuries. We are working to find new and better ways to get them back to work sooner.

### *Working Together*

It is a responsibility that all of us face to keep young workers safe. Since 1993 we've seen a significant reduction in the injury rate. We want to continue to bring that number down. It will take consultation, education, and people working together in partnership.

## **Gord Boyes, Contractor, Air-Temp Energy Systems**

### *Make-Up Air: What it is and Why you need it*

Gord Boyes, contractor with Air-Temp Energy Systems, provided an introductory lesson on "make-up" air and how it relates to designated smoking rooms. Here is a summary of that lesson:

Whenever the air in any indoor space is exhausted, you need to replace it with fresh new air, often referred to as "make-up" air. This is especially true in designated smoking rooms that require both a good ventilation system and an adequate supply of make-up air. However, not every room requires the same amount of make-up air. In calculating how much make-up air you need, you should consider not only the fumes and odours generated by tobacco smoke but also exhaust from sources such as washrooms, kitchens, and gas fireplaces.

Also, when setting up a ventilated smoking room, you need to consider the temperature of your make-up air. Obviously you don't want cold air pouring down on your patrons, so make-up air needs to be heated—generally to around 90°F. Overall, you are trying to ensure a nice even temperature; otherwise, draftiness becomes a problem.

There are a number of ways to regulate air temperature and ensure a steady supply of air. For example, to eliminate drafts you should set up a number of diffusers in different locations throughout your establishment.

Bottom line, said Boyes, there are numerous complexities in regulating make-up air. Demands and requirements vary greatly from one location to the next. Obviously, heating and cooling requirements are very different in Prince George than in Vancouver or in the Okanagan. The key is to customize heating, air conditioning, and ventilation systems for each location.

Boyes concluded by saying, while it can be costly to set up a smoking room that meets WCB regulations, there are many things you can do to reduce that cost and maximize your investment. "If you're going to do it, it's worth doing it right. If done properly, smoking rooms offer a more comfortable, healthier environment for smokers and non-smokers." And that, said Boyes, is a very worthwhile investment.

## **Erwin Walko, Owner, Comfort Agencies**

### *Ventilation Systems: Keeping it Simple*

With more than 25 years experience in the ventilation business, Erwin Walko had some advice for anyone thinking of putting in a designated smoking room: "When installing ventilation systems, do it right! Aim to maximize ventilation in the room."

There are many different ways to set up ventilation systems, said Walko, and many different types of fans to choose from. The important thing is to find the best solution for your establishment. Walko showed slides of various pubs and bars around the province where he and his company have installed ventilation systems. The ETS Regulation is actually "very workable," said Walko.

Comfort Agencies is a Vancouver-based importer and supplier of ventilation products.

## **David Jones, Manager, Connections Cabaret**

### *Building A Designated Smoking Room: A Success Story*

When David Jones, manager of a Burnaby-based cabaret, came to the forum, he had a story to tell. A success story, but like most good news stories, it didn't start out that way . . .

"Coming to terms with the WCB's ETS Regulation was quite a challenge," said Jones. "To begin with, more than 90 per cent of our customers are smokers." Relying on non-smoking clientele just didn't appear to be an option. "So, when the Regs first came in, we considered shutting down altogether."

But that wasn't a very good option either and, after further consideration, management at Connections Cabaret decided to put in a smoking room. As it turned out, that too was a challenge. "When we went to the city and said we wanted to set up a designated smoking room, no one knew what we were talking about." The building department sent them to the fire department who, in turn, sent them to the planning department. And quotes for the project ranged wildly—from \$30,000 to \$70,000. "It was," said Jones, "a frustrating process."

In spite of these setbacks, Jones and his colleagues persevered, ultimately deciding to build it themselves. "It cost \$17,000," said Jones. It didn't have to be that expensive, "but we wanted to make it as nice as possible." Nonetheless, the cabaret's regular clientele didn't like the idea. And the day after the change was made, the place was empty. Customers went to other pubs . . . but, when they discovered the rules were the same everywhere, they started returning. And since that time, business is pretty well back to normal.

Jones then offered his services to anyone in the room trying to come to terms with the WCB regulations. "For the price of a cold beer, I'll give my advice to anyone considering installing a designated smoking room." Remember, said Jones, you don't have to spend a lot. "We just wanted to build a nice space to say: 'we care about our customers.'"

David Jones' comments generated discussion about the cost of putting in a designated smoking room. A WCB engineer who has helped many owners and operators create smoking rooms said Connections Cabaret did a great job, but designated smoking rooms don't have to be that expensive. Costs have ranged everywhere from around \$600 to \$40,000. But the higher price included extensive renovations and refurbishing. The average cost is approximately \$3,000.

### **Sig Jantzen, Sanuvox**

#### *UV Air Purifiers: New Technologies*

Sig Jantzen, a representative from Sanuvox, spoke about ultraviolet (UV) technology and how it can be used to destroy bio-chemical contaminants in the air—including tobacco smoke. Sanuvox, a leader in air purification, manufactures and sells ultraviolet air purifiers and HVAC coil cleaners.

Jantzen began with a history of UV light and its evolution as a water, then air, purifier. Historically, it has had many applications; most recently to control bacteria in hospitals, schools, and prisons. And since September 11th, the American government has been looking at how it could be used to fight bioterrorism.

Today, that same technology can be used to purify air that has been contaminated with tobacco smoke. You still need a ventilation system to move the air around, but UV air purifiers can clean a lot of the air that has been contaminated. This is yet another tool available to those interested in setting up designated smoking rooms.

### **Sam Kastagner, Manager, Royal Canadian Legion**

#### *Operator's Story: Dealing with the New Regulation*

Sam Kastagner told her story of how the Royal Canadian Legion adapted to the new ETS Regulation:

In May 2002, when the WCB first brought in the new ETS Regulation, it was not well received. The veterans' immediate response: "This is a private club—they can't tell us what to do." Meanwhile, spokespeople kept saying that while some smokers may stop coming, non-smokers would pick up the slack. That never happened, and for the next four months, business was down and the Legion lost a lot of money.

It didn't help that some of the competition were not enforcing the rules. As a result, many of the Legion customers went to those pubs and bars instead. So, after much discussion, the Legion decided to build a designated smoking room. They opted for a deluxe model with floor-to-ceiling glass. And, in time, their customers returned.

"Working together with the WCB has been a good experience," said Kastagner. "Now we're all in a clean, smoke-free environment."

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**Elia Sterling, President of Theodor Sterling Associates Ltd.**

*New 3M Technologies*

One of BC's leading consultants on indoor air quality, Elia Sterling spoke about the ETS Regulation, how it came about, and the technology under development that will help the Hospitality Industry to meet that Regulation.

Sterling began with a summary of the WCB ETS Regulation, then went on to explain that the interpretation and application of that Regulation is evolving. "We're learning as we go," said Sterling. "But basically I think it is a good Regulation. After years of strife and strain, today the dialogue between the WCB and the Hospitality Industry is working well."

And, there is new technology under development that will make it easier and more cost-effective to meet those requirements. For example, 3M is developing a HEPA-grade HVAC solution that could be applied to a recirculating ventilation system. However, Sterling warned, owners and managers of pubs, bars, and restaurants need to look beyond the tobacco smoke. "Remember, it's not just about ETS; you still need 'make-up air' and you still have to meet the basic Indoor Air Quality requirements. The good news is that some of the air cleaning systems under development should be able to address all of these issues."

**Milford Crocker, Manager, ATI AirTest Technologies**

*CO<sub>2</sub> Sensors: Cost-Effective Technology*

Milford Crocker presented information about carbon dioxide (CO<sub>2</sub>) sensors and how they can be used to reduce energy costs in hotels, pubs, and restaurants. Apparently, there is a direct relationship between CO<sub>2</sub> levels and ventilation rates. By monitoring CO<sub>2</sub> levels, you can determine whether a room is adequately ventilated. If it is over-ventilated on a regular basis, you are wasting energy and, thus, money.

To illustrate his point, Crocker spoke about the hotel room in which the forum was being held. The ventilation system had been on all morning and air was pouring into the room non-stop. But the room was not anywhere near capacity. It didn't require that much air. Over time, Crocker explained, this can be costly. Ideally, you want to be ventilating at the required level—any lower and you aren't meeting the regulations; any higher and you are throwing money away. In other words, you need to adjust your ventilation as the occupancy level changes. Since occupancy is variable, so are your ventilation requirements.

In short, if you suspect you are under- or over-ventilating, measuring CO<sub>2</sub> levels can help diagnose the problem. AirTest Technologies sells a wide variety of instruments that can be used to measure/monitor CO<sub>2</sub> levels and assist with ventilation control. These instruments can be very economical, often paying for themselves in less than two years.

This presentation sparked a brief discussion about new technologies and how they can be applied—not only in terms of the ETS Regulation but in terms of disease prevention overall.

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## **Cory Cummings, Bar Manager, Rhino's Pub & Grill**

### *Staff Perspective: The Challenges, Experiences, and Results*

The final speaker of the day was Cory Cummings, bar manager for Rhino's Pub, a Coquitlam-based watering hole that installed a ventilated smoking room in May 2002. Having worked before and after the advent of smoking rooms, Cummings has seen the impact of the ETS Regulation on both customers and staff. Bottom line, he likes what he sees. "It wasn't an easy transition," said Cummings, but "I couldn't be happier with the end result."

Having a ventilated smoking room is a win-win proposition, Cummings explained. Everyone benefits. Staff are happy to be breathing cleaner air and customers appreciate that they now have a choice between a smoking and non-smoking room. Cummings himself feels the impact on a daily basis. "I don't come home smelling like an ashtray, I have less laundry to do, and I've had significantly fewer sinus and throat troubles. I've only taken two sick days since last May." In fact, he said, all his co-workers appear to be taking fewer sick days.

And now that the smoking room is well ventilated, there are no arguments about who should be working the smoking room. "We just divvy it up so everyone gets equal time."

Cummings cautioned, however, it hasn't all been smooth sailing. The transition was tough. When the revised Regulation first came into effect, customers weren't happy. "Many said they were leaving and weren't coming back. But when they found it was the same everywhere, gradually they accepted it and started to return. And today many of our customers say they're happy to have the choice [between smoking and non-smoking rooms]." An added benefit: fewer complaints from non-smokers.

In closing, Cummings said he likes what the WCB and the Hospitality Coalition have done. "It's a good Regulation." However, he added a cautionary note. "It's important that all bar and pub owners are operating on a level playing field so the WCB should continue to enforce the Regulation."

## Ventilation of Indoor Smoking Areas for Public Entertainment Facilities

*Helpful Hints from the WCB*

Note: Proper interpretation of this information requires the reader to have thorough knowledge of heating, ventilation, and air conditioning (HVAC) systems, and related engineering principles.

Ventilation of a designated smoking area (DSA) should limit the build-up of environmental tobacco smoke (ETS) in the room and prevent the transfer of ETS to non-smoking areas. To achieve this, you first need to know the maximum number of people permitted in the smoking room and the area of all openings from non-smoking areas to the smoking room.

A minimum ventilation rate of 35 cubic feet per minute (cfm) per person is required for a smoking room. To prevent the transfer of smoke there must be a sufficient flow of air from the non-smoking area into the smoking room. An airflow velocity of at least 70 feet per minute (fpm) will satisfy this requirement. This is equivalent to 70 cfm per square foot of openings between the two areas. The total exhaust ventilation rate for the smoking room would be the greater of 35 cfm/person **or** 70 cfm/square foot of openings.

The smoking room must have a separate non-recirculating exhaust ventilation system. Tempered replacement air must be provided to balance exhaust from the smoking room. Replacement air may be provided by a forced supply and/or passive transfer vent from non-smoking areas.

***The Regulation contemplates the use of an air cleaning system. However, the Board is not aware of a system that can by itself meet the Regulation's air flow and exhaust requirements. An air cleaning system may be used to remove some tobacco smoke components, but that filtered air must not be recirculated to non-smoking areas.***

A worker cannot spend more than 20% of their work period in a smoking room during a 24-hour day. The room must be cleared of smoke before a worker may spend more time in the DSA. Four air changes, after smoking has stopped, are **needed** for smoke to be exhausted from a DSA.

In accordance with WCB policy, the WCB does not approve ventilation systems. The WCB Regulation and related ASHRAE standards require the ventilation system to be properly designed, operated, and maintained. The performance of a ventilation system will be evaluated by the WCB based on the design, construction, and operation when it is in actual use.

Note: The ventilation system must meet all other applicable building codes and municipal requirements.

An example of a layout and ventilation options for a smoking room is shown on page 12.

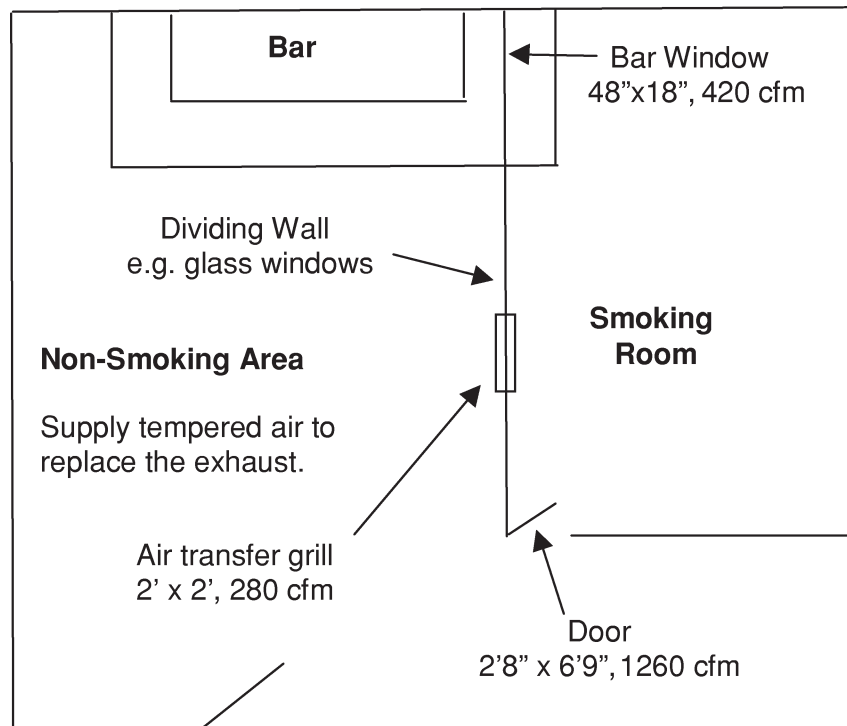
## Designated Smoking Room Ventilation

(An Example)

Section 4.83 of the WCB *Occupational Health & Safety Regulation* allows for a designated smoking room. The room must have a separate, non-recirculating exhaust ventilation system that maintains adequate airflow from non-smoking to smoking areas. This diagram shows one example of a designated smoking room and illustrates some features of such a system. Arrange the ventilation system to exhaust either a or b below, whichever is greater:

- a. 35 cfm per occupant or,
- b. 70 cfm per square foot of openings.

The performance of any ventilation solution will be evaluated based on the design, construction, and operation of the system in *actual use*.



**The diagram shows** an example of a designated smoking room. In this example the smoking room holds 30 people, and there are 3 openings as shown.

The minimum exhaust ventilation from the smoking room would be the greater of:

a. 30 people @ 35 cfm each = 1050 cfm

b. Total for the openings;

Door (18 sq.ft.)	1260 cfm
Bar window (6 sq.ft.)	420 cfm
<u>Transfer grill (4 sq.ft.)</u>	<u>280 cfm</u>
Total	1960 cfm

In this example (b) is greater than (a), so a 1960 cfm exhaust fan would ensure compliance with section 4.83 (4)(d)(e)&(f) of the Regulation.

Note that an equivalent amount of air must be transferred to the smoking room.

### Notes

1. An air cleaning system may be used but it will not reduce the ventilation required. An air cleaning system must have a minimum 95% operating efficiency at 0.3 micrometre particle size.
2. The smoking room must be under negative pressure (i.e. air supply slightly less than exhaust).
3. An airflow velocity of 70 ft/minute through openings will satisfy the requirement that air does not transfer from a designated smoking room to a non-smoking area.
4. A forced air supply and/or an air transfer grill may be used to supply air to the smoking room. The transfer grill should be sized to provide an air velocity within the range of 70 to 300 ft/minute.
5. After smoking has stopped, four (4) air changes are needed for smoke to clear from the smoking room. Example: A 420 sq.ft. smoking room with a 10 ft. ceiling. The time for 4 air changes  $\frac{420 \text{ sq.ft.} \times 10 \text{ sq.ft.}}{1960 \text{ cfm}} \times 4 \text{ changes} = 9 \text{ minutes}$
6. This guideline is for professional use. Proper interpretation will require the reader to have a thorough knowledge of HVAC systems and engineering principles. Solutions are site specific and may vary significantly from this example.

## Frequently Asked Questions Regarding Environmental Tobacco Smoke in the Hospitality Industry

1. **What authority does the Workers' Compensation Board (WCB) have to enforce health and safety regulations to manage workers' exposure to environmental tobacco smoke (ETS)?**

The WCB is a regulatory agency that administers the *Workers Compensation Act*, which is an act of the BC Legislature. Under the Act, the Board has the authority to make and enforce regulations to protect workers from known workplace hazards such as ETS and to ensure that the workplace parties comply.

2. **What has occurred since the March 2001 WCB ETS announcement that new amendments would become effective September 10, 2001?**

On January 16th, 2002, the provincial government announced revised health and safety regulations to manage workers' exposure to ETS in BC's hospitality industry. This announcement followed a decision by the Minister of Skills Development and Labour to delay implementation pending further consultation and review.

3. **What does the *Occupational Health and Safety Regulation* require for controlling environmental tobacco smoke in hospitality establishments as of May 1, 2002?**

The Regulation requires employers in public entertainment facilities to control workers' exposure to environmental tobacco smoke through one of the following options:

- Prohibiting smoking at the worksite
- Restricting smoking to a designated smoking area such as a safe outdoor location, or a designated smoking room (DSR) that is structurally separate from other areas

Under the revised Regulation, workers in the hospitality industry have the right to choose whether to enter a designated smoking room and may not be discriminated against for choosing not to enter a designated smoking room. Where workers do choose to enter the designated smoking room, the Regulation requires there be only intermittent exposure — not to exceed 20% of their work period.

4. **What options are available for an employer who chooses to allow smoking at the workplace?**

There are a number of ways hospitality employers can comply with the ETS requirements to manage workers' exposure. Smoking can occur in:

- A separately ventilated, structurally separated room which workers may choose to enter for a period of time not to exceed 20% of their work period. Entry must be intermittent.

- Patios or outdoor areas that have free movement of air. This usually means an area with a floor, a roof, and obstructions on no more than two sides. Adjacent buildings and objects must be taken into consideration. Smoke should not enter the indoor work area. Employers are responsible for demonstrating that ETS does not accumulate.

Compliance options developed by employers in the hospitality industry must also comply with the *Liquor Control Act* of BC and applicable municipal bylaws.

**5. If a worker chooses not to enter a designated smoking room, are there exceptions?**

Workers may be required to enter a designated smoking room under restricted circumstances such as when the smoke has been effectively removed, in an emergency, or to investigate for illegal activity.

**6. What compliance options are available while designated smoking areas are being constructed in a hospitality establishment?**

Hospitality employers have an obligation to manage worker exposure to ETS while construction is being completed using all reasonable and practicable administrative controls, which could include a safe outdoor location or prohibition.

**7. What is the enforcement process?**

Leading up to May 1, 2002 Prevention staff will provide information on the amended requirements. This will be a period of education and consultation with affected stakeholders. After the effective date of May 1, 2002 employers will be expected to be in compliance with the amended environmental tobacco smoke requirements. Non-compliance can result in enforcement action.

**8. Would penalties be imposed for non-compliance?**

The Board has the authority to levy administrative penalties for repeated or wilful non-compliance of the health and safety requirements. Basic penalty amounts are determined by formulas based upon assessable payroll and risk, and can range from \$1000 to \$75,000. Increased penalties may result from continued and/or wilful non-compliance.

**9. What else do employers need to consider?**

Employers may wish to contact the Board to obtain information on specific requirements for controlling worker exposure to ETS, the ventilation requirements for a DSR, and other exposure control options. In addition:

- **Local government bylaw departments** — to learn about any smoking-related bylaws in existence that restrict your ability to operate a DSR
- **Architects (and/or ventilation engineers) and contractors** — to consult and initiate the development of DSR construction plans

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- **Your local building department** — to determine whether a development or building permit is required to construct a DSR in your area
  - **Your local fire department or fire authority** — to determine whether a development or building permit is required to construct a DSR in your area and to determine the occupant load allowed within each DSR
  - **Liquor Control and Licensing Branch** — to obtain information on applying for approval to alter the structure of your licensed establishment.

