

**SENATE COMMITTEE ON AGRICULTURE & NATURAL RESOURCES**

**April 12, 1999 Hearing Room 50**

**4:30 p.m. Tapes 94 - 96**

**MEMBERS PRESENT: Sen. Gary George, Chair**

**Sen. Thomas Wilde, Vice-Chair**

**Sen. Tony Corcoran**

**Sen. Joan Dukes**

**Sen. Bill Fisher**

**Sen. Marylin Shannon**

**MEMBER EXCUSED: Sen. Ted Ferrioli**

**STAFF PRESENT: Brad Harper, Administrator**

**Patrick, Administrative Support**

**MEASURE/ISSUES HEARD: Informational Meeting: Urban Industrial Air Emissions**

**SB 1100 Public Hearing**

**SB 1101 Public Hearing**

**SB 964 Public Hearing**

These minutes are in compliance with Senate and House Rules. Only text enclosed in quotation marks reports a speaker's exact words. For complete contents, please refer to the tapes.

TAPE/#	Speaker	Comments
TAPE 94, A		
002	Chair George	Calls the meeting to order at 4:42. Opens an informational meeting on urban industrial air emissions.

**URBAN INDUSTRIAL AIR EMISSIONS**

010	Sharon Genasci	Documentary Filmmaker, Resident of Portland. Describes the environment in her Portland neighborhood. States that her investigation into the causes of poor air quality there led to her documentary film about the pollutants that enter the environment in Portland and other western cities. Indicates that neighborhood residents used air samplers provided by the Department of Environmental Quality (DEQ) to measure air quality and that they found over 70 toxic compounds in the air.
035		<b>VIDEO PRESENTATION: "WHAT'S IN OUR AIR" (EXHIBIT A)</b>  Documents industrial pollution in Portland, Oregon, Seattle, Washington, Martinez, California, and Richmond, California. Discusses the types of pollution found in the neighborhoods, its sources, and its effects on the residents of the communities.
401	Chair George	Asks if the "Bucket Brigade" is still in operation.
403	Genasci	Replies that it is and that it recently received a \$1,000 donation for further study. Adds that glass dishes are being used also, to catch particulates that may carry hazardous molecules.
<b>TAPE 95, A</b>		
005	Chair George	Mentions that there are DEQ representatives present who will be able to provide an additional report on the monitoring project.
008	Genasci	States that there has been some confusion as to the monitoring and precautions that have been taken. Says that, at the moment, there is no capture equipment used during the loading and unloading of tanker barges.
015	Sen. Dukes	Asks if there has been any effort made to clean up the problem areas as a result of the findings of the study.
018	Genasci	Replies that there is now a requirement for capture equipment on tankers during the loading and unloading processes. Indicates that an enormous amount of benzene escapes during transfer.
025	Sen. Dukes	Asks for clarification that the decision has been made to require the capture equipment but that there is currently none in use, meaning that there has been no reduction in emissions.
028	Genasci	Confirms Sen. Dukes' statement and adds that the requirement is a "step in the right direction." Asserts that there should be more monitoring, especially "fence-line" monitoring, which could confirm that there are "hot spots" close to industry where people are subjected to greater amounts of toxic substances. Disputes the common belief that most of the health danger is a result of traffic pollutants and

		says that fence-line monitoring could dispel that belief. Discusses several examples of pollution-related health problems in North Portland.
047	Sen. Dukes	Asks Ms. Genasci how long she has been working in North Portland.
050	Genasci	Replies that she has lived there for about five years. States that it is very hard to live near such strong industrial odors.
052	Chair George	Mentions the solvent recovery performed by dry cleaner operators, which was documented in the video presentation, as "good news." Inquires about the effect that the solvent recovery effort has had on dry cleaning businesses, specifically if there has been an increase in prices.
058	Genasci	Confirms that there have been slight increases in dry cleaning rates. States that there have been some operators who have expressed their displeasure with the project but that the overall response has been positive. Adds that the members of her neighborhood are happy to pay a little more for dry cleaning if it will result in cleaner air. Mentions a recent study by the Environmental Protection Agency (EPA) of the cumulative impact of eight carcinogenic chemicals found in most communities and reiterates that there were over 70 toxic chemicals found in her study.
066	Chair George	Comments on the accumulation of chemicals and says that even relatively harmless chemicals may become dangerous when they come into contact with one another. Mentions that he has had experience with such matters, having worked with pesticides.
074	Genasci	Mentions that certain studies have applauded the elimination of dangerous chemicals in the water supply, despite the fact that they still exist in the air. Indicates that there may be transference of dangerous substances between air and water.
084	Sen. Corcoran	Mentions the compound effect of multiple chemicals that was discussed in the video and asks Ms. Genasci for her opinion on the issue of pesticide and toxic right-to-know laws.
091	Genasci	Replies that everyone has an interest in knowing what types of things they may be exposed to, especially when they see so many of their friends and neighbors suffering from illnesses. Says that a desire to know about chemicals in the air and water is rational and intelligent.
101	Chair George	Opens a public hearing on both SB 1100 and SB 1101.
<b><u>SB 1100 AND SB 1101 PUBLIC HEARING</u></b>		
107	Sen. Wilde	Mentions that he lives in the same area as Ms. Genasci and that he has developed respiratory problems since moving there. Expresses concern for the health of his children in such an environment.

		Indicates that he introduced SB 1101 as a way to benefit the environment in a cost-effective manner. Recalls his career as a violinmaker and the noticeable change in quality of wood over time as a result of the sulfur emissions. Says that his desire to reduce the sulfur content in gasoline by 90 percent at a cost of \$.03-.05 per gallon resulted in the creation of SB 1101. Mentions that the current industry standards for gasoline are 300-340 parts per million sulfur, which would be reduced to a maximum of 80 parts per million, referred to as the 30/80 standard.
156	Sen. Wilde	Acknowledges that the up-front cost to oil companies could be very high, as much as \$1 billion if they have not yet approached the standard. Says that two factors would determine the cost to individual companies: the source of the crude oil used and the requirements they currently operate under. Mentions that California, Canada, Japan, England, and the European Union have recently adopted the 30/80 standard. States that the sulfur content of North Slope crude oil, which is used predominantly in the Pacific Northwest, has a greater sulfur content than crude oil from other sources, requiring more refining to bring the oil to the 30/80 standard than other types of crude such as "Texas Sweet." Asserts that lower sulfur content would also be less damaging to catalytic converter units in automobiles. Asks that the committee take no action on the bill until such time as amendments can be drafted to address some areas of concern.
204	Sen. Wilde	Expresses frustration with the regulatory policies of the EPA. Says that the legislature should not wait for standards to be implemented when there are alternatives which can protect the health of Oregonians
225	Chris Hagerbaumer	Air and Transportation Director, Oregon Environmental Council (OEC). Testifies in support of SB 1101 ( <b>EXHIBIT B</b> ). States that sulfur contributes to all sorts of air pollution, as it "inhibits the performance of pollution control equipment." Cites studies showing that older car emissions increase with the use of high sulfur content gasoline. Asserts that low-sulfur gasoline would mean cleaner air and fewer respiratory problems, citing California as an example. Adds that low-sulfur gasoline could also inhibit global warming. States that the bill should be amended to further reduce the sulfur content, mentioning that the actual cost of the cleanup may be lower than current estimates indicate. Asserts that the bill should be turned into a Joint Resolution to Congress for implementation at the national level.
284	Sen. Corcoran	Asks for the current sulfur content of gasoline.
289	Hagerbaumer	Replies that the average sulfur content in the United States is 450 parts per million and estimates that the average in Oregon is 350 parts per million.
294	Sen. Wilde	Concurs with Ms. Hagerbaumer's estimates. Indicates that the standards requested by the bill were a compromise with the industry, designed to be implemented as quickly as possible. Asserts that, since the bill will be opposed in its current form, it may as well be amended to reflect the more stringent standards requested by the OEC.
314	Sen. Corcoran	Requests clarification on the 30/80 standard.

316	Sen. Wilde	Replies that the "30" refers to the target level, while "80" represents the maximum allowable sulfur content.
335	Hagerbaumer	Testifies against SB 1100 ( <b>EXHIBIT C</b> ). Discusses efforts to reduce toxic emissions in Oregon. States that Oregon's current approach is not strenuous enough to eliminate the danger pollutants pose to public health. Says that the work group proposed by the bill would unnecessarily duplicate the efforts of the Hazardous Air Pollutants Consensus Group. Offers the alternative of a fine particulate task force. Discusses projected problem areas. Acknowledges that DEQ has been proactive in the area but that further efforts, such as the task force she proposes, would be beneficial.
388	Sen. Corcoran	Wonders what the source is of fine particulate emissions in Oak Ridge. Indicates that there is no industry in Oak Ridge, meaning that a reduction in particulate emissions would require limiting the use of wood stoves.
397	Hagerbaumer	Replies that better, more efficient wood stoves would reduce particle emissions. Adds that some communities, such as Boise, Idaho, have limited the use of wood stoves during periods of atmospheric inversion.
412	Sen. Dukes	Asks how wood stove use might be limited.
416	Hagerbaumer	Replies that she is not sure as to how wood stove use is limited in communities such as Boise. Says that automobile use in Paris is limited when the air quality is poor by only allowing cars with even or odd license plate numbers on the road. Acknowledges that such measures are "draconian" but could nevertheless be considered by the task force.
434	Sen. Wilde	<p>Mentions that Missoula, Montana faced a similar situation. Indicates that several steps were taken to reduce the impact of wood stoves on air quality:</p> <ul style="list-style-type: none"> <li>• New development was halted until the problem was addressed</li> <li>• Installation of alternative heating systems</li> <li>• Higher standards for wood stoves</li> </ul> <p>States that the experience of the residents of Missoula shows that positive actions can be taken, although they are not always easy or cheap. Mentions his experience in China as a further example. Asserts that these types of problems should be dealt with incrementally, once they are first detected, rather than waiting to take drastic action after the problem becomes "a disaster."</p>
<b>TAPE 94, B</b>		
031	Chair George	States that technology has made the situation ripe for change. Mentions that newer trucks, which have computer-controlled fuel injection systems, produce noticeably less pollution than older models. Asserts that future models of cars will make even more improvements. Argues that it is important to keep the pressure on companies to continue working towards environmentally safe vehicles and products. Concurs with Sen. Wilde's statement that changes should be incremental, rather than drastic.

071	Bob Russell	Director of Public Affairs, Oregon Transportation Association (OTA). States that no one within OTA can project the potential impact of new sulfur content standards on diesel engines. Requests that the committee bring representatives for truck manufacturers to testify as to the effect that the standards might have.
080	Langdon Marsh	Director, DEQ. Testifies against SB 1101 ( <b>EXHIBIT D</b> ). Expresses support for stronger standards regarding sulfur emissions. States that the national average is currently 500 parts per million. Supports the 30/80 standard, adding that sulfur emissions of 30 parts per million would be the equivalent of taking 500,000 vehicles off of the roads in Salem and Portland. Says that the technology exists to produce cleaner gasoline but that smaller refineries would have problems implementing the standard. Argues that a federal standard makes the most sense and that EPA regulations should be imposed soon. Expresses support for amending the bill to impose more stringent targets
141	Sen. Wilde	Asks if the current federal standards for diesel engines are to be altered.
145	Marsh	Replies that he recently advocated for the imposition of the 30/80 standard at the federal level. Indicates that similar regulations are working their way through the federal system but that there is no current information as to their progress.
160	Sen. Wilde	Requests confirmation that the regulations would apply to diesel engines.
163	Marsh	Confirms Sen. Wilde's statement.
165	Sen. Fisher	Wonders if the reduction of sulfur emissions will have an adverse effect on the operation of motor vehicles or whether it will require special equipment.
171	Marsh	Replies that he is unaware of any benefit that sulfur provides to fuel combustion. Says that it has a deleterious effect on catalytic converter systems and diesel engines.
181	Greg Green	Administrator, Air Quality Division, DEQ. Confirms that sulfur provides no benefit to vehicle operation.
185	Chair George	Indicates that the committee will receive further information on the subject when testimony is given at a later date by truck manufacturers. Compares the removal of sulfur from gasoline to the removal of lead, which was an issue in the past. Asks if the "rotten egg" smell produced by a catalytic converter unit is the result of the combustion of sulfur.
195	Marsh	Replies that sulfur combustion creates such a smell.
202	Chair George	Mentions that vehicles he owns have had problems with the catalytic converter and oxygen sensors, which were related to the sulfur content of the gasoline used by the car. Indicates that newer cars are designed for low-sulfur gasoline. Asks what countries have instituted sulfur emission standards of less than 150 parts per million.

210	Marsh	Replies that he is unsure of the status of other countries.
215	Green	States that Canada, members of the European Union, and Japan have enacted low-sulfur standards.
221	Marsh	Testifies against SB 1100 ( <b>EXHIBIT E</b> ). Supports the issues raised by the bill. Indicates that federal limits similar to those outlined in the bill will likely be enacted before the legislative session ends. Discusses the work of the Hazardous Air Pollutants Consensus Group, which addresses a long list of issues related to toxics in Oregon. Mentions the potential hazards of chemical interaction.
270	Chair George	Argues the large budget of the EPA has not produced sufficient knowledge on the subject. Asks if there is any pressure being put on the EPA to produce results that could inform the public about the detrimental effects of these chemicals.
280	Marsh	Replies that the EPA has been unable to establish firm results on even a single family of substances, dioxins. Indicates that there is insufficient federal investment for research, given the difficulty of studying interactions between so many chemicals. Acknowledges that there is much information on substances such as tobacco and benzene but very little on others.
303	Sen. Fisher	Mentions that there were plans discussed at the 1-13-99 hearing regarding a pipeline for gasoline transportation. Requests the status of the pipeline and what the potential effects of its construction might be.
325	Marsh	Indicates that the pipeline was to be an integral part of the Portland Metro Area Clean Air Maintenance Plan. Says that the timeline for its installation has been hampered by an elongated environmental process, which may even prevent the construction of the pipeline altogether. Suggests that the rulemaking process should be developed for transfer operations with the assumption that the pipeline is not a viable option.
357	Sen. Fisher	Asks if the rules under development are designed to reduce the use of truck or barge transportation.
361	Marsh	Replies that the transfer process would remain relatively constant, but that it would be better controlled and monitored.
371	Green	Explains that fuel is piped to Portland from the Seattle area, loaded on barges, and transported up the Columbia River by barge. Says that the pipeline was to eliminate the barge traffic. Indicates that if the pipeline is not constructed, the transfer of fuel from the Seattle pipeline to barges will be altered to reduce emissions during the process.
381	Marsh	Reiterates that, given the uncertainty of the future of the pipeline project, the only way to reduce barge traffic would be to utilize trucks for fuel transportation.
403	Sen. Fisher	Wonders if the individuals calling for cleaner air are the same individuals who

		are responsible for the difficulty in constructing the pipeline.
414	Marsh	Replies that there are a number of groups opposed to the pipeline on the grounds that it would create interference for Columbia Gorge communities. Indicates that the groups are not the same ones that have been calling for the reduction of emissions.
<b>TAPE 95, B</b>		
003	Sen. Fisher	Suggests that those who are opposed to the use of heavy equipment for the construction of the pipeline should develop their own alternatives.
009	Chair George	Asks if the removal of dams on the Columbia would impact the transportation of fuel to Eastern Oregon.
013	Marsh	Replies that there would be a resultant increase in truck traffic to and from the Tri-Cities and Idaho, which represent the upper end of the transportation area.
021	Sen. Wilde	Expresses a desire to continue the discussion regarding potential legislative involvement through the creation of a task force. Says that federal efforts should not be duplicated on the state level.
038	Marsh	Agrees to work towards a resolution.
041	Chair George	Closes the public hearing on SB 1100 and SB 1101 and opens a public hearing on SB 964.
<b><u>SB 964 PUBLIC HEARING</u></b>		
048	Brad Harper	Committee Administrator. Gives a brief description of the bill and mentions that it was sponsored by Metro. Explains that calcium hypochlorite is commonly used in residential swimming pools. Describes the potential for health hazards related to calcium hypochlorite. States that the bill would designate the substance as a hazardous chemical, altering the required methods for its disposal. Indicates that the ñ1 amendments ( <b>EXHIBIT F</b> ) have been submitted for consideration by the committee.
063	Ray Phelps	Representative, Metro. Testifies in support of SB 964 ( <b>EXHIBIT G</b> ). Indicates that the ñ1 amendments were proposed by Metro out of concern that the designation of calcium hypochlorite as hazardous waste may be too severe. Adds that Metro would prefer that the substance merely be banned from landfills.
080	Chair George	Asks if the amendment would allow Metro to keep pool chlorine out of the waste stream.



082	Phelps	Replies that it would.
083	Terry Peterson	Interim Director for Solid Waste, Metro. Explains that Metro, as a regional government, is responsible for the disposal of solid waste and that it disposes of approximately 750,000 tons annually. Describes the waste transfer process. States that SB 964 is designed to prevent the disposal of pool chlorine through the standard disposal process, as it represents a potential hazard to workers, contractors, and the public. States that safety incidents are rare, although a particular incident involving pool chlorine was among Metro's most serious waste disposal accidents.
101	Don Matott	Lead Driver, Northwest Portland Transfer Station. Describes the accident in which he was injured by gas created during a chemical reaction between calcium hypochlorite and water. Explains that pool chlorine combines safely with large quantities of water but reacts with small quantities to create a "mustard gas"-like substance. States that he was enveloped by a cloud of chlorine gas, which burned and blistered his skin and respiratory tract. Indicates that the injuries he sustained in the incident have become chronic. Argues that people must be made aware of the potential hazards of pool chlorine.
141	Peterson	Asserts that there are alternatives to disposal of pool chlorine in the trash, such as recycling facilities, private companies which offer collection services, and monthly DEQ collection days. Admits that such services may need to be expanded to allow for the disposal of calcium hypochlorite. Cites California and Minnesota as states that have adopted stricter standards. Reads the warning label on a pool chlorine package.
167	Sen. Corcoran	Asks if chemicals with similar chemical composition are common and if they also pose a health hazard.
171	Peterson	Replies that other substances with similar chemical composition are rarely encountered. Mentions other substances that are occasionally encountered.
180	Sen. Corcoran	Wonders why a person would throw out pool chlorine.
184	Peterson	Replies that it is probably thrown out due to a lack of knowledge of the potential hazards of doing so. Adds that pool supply businesses occasionally go out of business and dispose of their stock in an improper manner.
191	Chair George	Mentions that Metro has a disposal education program and suggests that pool chlorine should be included. Asks if the venting systems for disposal trucks could be altered to prevent similar accidents from occurring in the future.
200	Matott	Replies that disposal trucks have many vents but that the main vent, from which the chlorine gas emanated, is necessary to prevent the collapse of the trailer unit.
210	Sen. Wilde	Inquires as to whether it would be possible to limit the amount of air leaving the front vent in order to prevent accidents.

215	Matott	Replies that such a change would not be feasible. States that the safety precaution Metro has instituted is to monitor the front vent with a camera, rather than requiring drivers to monitor it themselves.
226	Sen. Fisher	Recalls his experience with poison gas training from the military and describes the deleterious effects that such substances have on the human body.
275	Kristan Mitchell	Governmental Affairs Director, Oregon Refuse and Recycling Association (ORRA). Testifies against SB 964. States that the members of the ORRA with whom she has spoken have been unanimous in their opposition to the bill and the ñ1 amendment. Asserts that worker safety is important and that a great deal of resources are put towards safety training and personal protection devices. Acknowledges that safety precautions cannot completely prevent hazards from household waste and that many such products remain unregulated. States that commonly encountered health hazards range from acids to broken glass.
335	Mitchell	Describes the problems with maintaining and enforcing a ban on particular substances from trash disposal. Suggests that an education program would be more beneficial than a ban on pool chlorine, as "bad actors" are unlikely to heed such restrictions, choosing to dump hazardous materials on the roadside. Mentions that there is uncertainty as to how to determine whether a landfill operator has "knowingly" accepted hazardous materials. Concludes that there are no reasonable alternative disposal options, particularly outside of the Metro area, meaning that landfills may need to continue to bear the brunt of the problem.
400	Chair George	Indicates that the issues raised by Ms. Mitchell have been sufficient to warrant further review of the bill and the ñ1 amendment.
420	Lauri Aunan	Assistant to the Director, DEQ. Testifies against SB 964 ( <b>EXHIBIT H</b> ). Shares the concerns for worker safety expressed by the previous witnesses and supports efforts to keep pool chlorine out of the waste stream. States that there are few, if any, alternative disposal facilities for calcium hypochlorite outside of the Metro area. Mentions two Portland-area disposal facilities and says that there is no practical way to transport materials from remote locations to those facilities. Argues that a ban on disposal of pool chlorine could result in methods that are even worse. Asserts that Metro can adopt local ordinances to deal with the problem locally as a trial for expanding the program.
<b>TAPE 96, A</b>		
035	Chair George	Requests that Ms. Aunan work with Metro towards a local ordinance. Expresses concern over the potential for improper disposal resulting from a ban on conventional disposal.
050	Sen. Fisher	Inquires as to whether the residue from pool chlorine poses a potential health hazard.
063	Aunan	Replies that she does not know if the residue is hazardous and offers to investigate the matter.

068	Sen. Fisher	Mentions that adding small amounts of pool chlorine to spas over time could result in the eventual buildup of hazardous amounts of the chemical residue.
077	Chair George	States that communities such as Los Angeles would be at exceptional risk in that event, given the large number of residential swimming pools there.
080	Edward Johnston	Representative, Lincoln County. Expresses concern for wildlife that may be adversely affected by improper disposal of calcium hypochlorite.
		Additional testimony was submitted to the committee for the consideration of the members <b>(ESHIBIT I)</b> .
089	Chair George	Closes the public hearing on SB 964 and adjourns the meeting at 6:40 p.m.

Submitted By, Reviewed By,

Patrick Brennan, Brad Harper,

Administrative Support Administrator

#### **EXHIBIT SUMMARY**

**A ñ Urban Industrial Air Emissions, Video:"What's In Our Air," Sharon Genasci, oversize**

**B ñ SB 1101, testimony, Chris Hagerbaumer, 2 pp.**

**C ñ SB 1100, testimony, Chris Hagerbaumer, 2 pp.**

**D ñ SB 1101, testimony, Langdon Marsh, 2 pp.**

**E ñ SB 1100, testimony, Langdon Marsh, 8 pp.**

**F ñ SB 964, -1 amendments, staff, 1 p.**

**G ñ SB 964, testimony, Ray Phelps, 2 pp.**

**H ñ SB 964, testimony, Lauri Aunan, 2 pp.**

**I ñ SB 964, testimony, Mark Leary, 1 p.**