

3.5 AIR QUALITY AND ODOR

This section describes existing air quality conditions, regulations, and impacts of development, with an emphasis on impacts from industrial and commercial uses. Section 3.2:

Transportation also includes information on existing conditions and air pollution impacts related to vehicular traffic.

3.5.1 EXISTING CONDITIONS AND REGULATORY FRAMEWORK

3.5.1.1 Criteria Air Pollutants

Based upon the Federal Clean Air Act requirements, the Environmental Protection Agency (EPA) established national ambient air quality standards (NAAQS) for six common pollutants: carbon monoxide, particulate matter less than 10 micrometers in diameter, ozone, sulfur dioxide, lead and nitrogen dioxide. Federal law requires that these standards be met and establishes deadlines for states to develop and implement plans to achieve the air quality standards. Geographic areas in which a primary or secondary standard is violated are designated as "nonattainment areas" for the particular pollutant.

The Washington State Department of Ecology (DOE) and the Puget Sound Air Pollution Control Agency (PSAPCA) administer the provisions of the Clean Air Act and operate monitoring stations to evaluate conformance with the Act. DOE and PSAPCA have established state and local ambient air quality standards for the six criteria pollutants listed above that are at least as stringent as the national standards. Table 3.5-1 shows the ambient air quality standards established by the EPA, DOE and PSAPCA.

NAAQS (Criteria) Pollutants - Sources, Effects

Particulate Matter. Particulate matter includes small particles of dust, soot, organic matter and compounds containing sulfur, nitrogen, and metals. Airborne particulate matter can cause respiratory diseases and cancer, leave residue on structures, and reduce visibility. Suspended particulates can include toxic elements such as lead, cadmium, antimony, arsenic, nickel, vinyl chloride, asbestos, and benzene compounds, which then enter respiratory, digestive and lymphatic systems. Particulates enter the air from industrial operations, from vehicular traffic, from fuel combustion, including wood stoves and fireplaces, and from construction and grading activities. When emitted to the air, the wind disperses and transports particulate matter. The national ambient air quality standard measures only that portion of particulate matter with particle diameters smaller than or equal to 10 micrometers (PM₁₀).

Table 3.5-1 -- Ambient Air Quality Standards

Pollutant	National (EPA)		State	
	Primary	Secondary	Ecology	PSAPCA
Total Suspended Particulate Matter (TSP)				
Annual Geometric Mean ($\mu\text{g}/\text{m}^3$)			60a	
24-hour average ($\mu\text{g}/\text{m}^3$)			150b	
Inhalable Particulate Matter (PM₁₀)				
Annual Arithmetic Mean ($\mu\text{g}/\text{m}^3$)	50	50	50	50
24-hour Average ($\mu\text{g}/\text{m}^3$)	150c	150c	150c	150c
Sulfur Dioxide (SO₂)				
Annual Average (ppm)	0.03a		0.02a	0.02a
30-day Average (ppm)				0.04a
24-hour Average (ppm)	0.14b		0.10b	0.10a
3-hour Average (ppm)		0.50b		
1-hour Average (ppm)			0.25d	0.25d
1-hour Average (ppm)			0.40b	0.40a
Carbon Monoxide (CO)				
8-hour Average (ppm)	9b		9b	9b
1-hour Average (ppm)	35b		35b	35b
Ozone (O₃)				
1-hour Average (ppm)	0.12c	0.12c	0.12c	0.12c
Nitrogen Dioxide (NO₂)				
Annual Average (ppm)	0.05a	0.05a	0.05a	0.05a
Lead (Pb)				
Quarterly Average ($\mu\text{g}/\text{m}^3$)	1.5a	1.5a		1.5a

Primarystandard designed to protect health with an adequate margin of safety
Secondary standard designed to protect health from any known or anticipated effects (such as soiling, corrosion, damage to vegetation, etc.) associated with pollutants
 $\mu\text{g}/\text{m}^3$ micrograms per cubic meter
ppmparts per million

- a ...never to be exceeded
- b ...not to be exceeded more than once a year
- c ...standard attained when expected number of days per year with maximum hourly average above this limit is equal to or less than one
- d ...not to be exceeded more than twice in seven days
- e ...not to be exceeded more than one in eight hours

Carbon Monoxide. Carbon monoxide is a colorless, odorless and extremely poisonous gas that reduces the oxygen-carrying capability of blood. It also weakens the contractions of the heart, thus reducing the amount of blood pumped throughout the body, can affect the functioning of the lungs and brain, and may aggravate arteriosclerosis. Carbon monoxide is formed by incomplete combustion of carbon or a carbonaceous material, including gasoline. In the Puget Sound region, motor vehicles are the primary source of carbon monoxide.

The highest ambient levels of carbon monoxide occur during winter months, in proximity to congested motor vehicle traffic (late afternoon commuting and around shopping centers, particularly during holiday periods). Concentrations increase during stable atmospheric conditions and light winds, which limit dispersion and dilution of pollutant emissions.

Sulfur Dioxide. Ambient air standards for sulfur dioxide were established to prevent increases in respiratory diseases, plant damage and odor. Sulfur dioxide damages and irritates lung tissue and aggravates symptoms of lung and heart disease. Sulfur dioxide enters the air mainly from industrial processes and from the combustion of sulfur-containing fuels such as coal and oil. Industrial sources include smelters, paper mills, power plants and steel manufacturing plants. The Everett Port area is one of three main industrial areas in the Puget Sound region with sulfur dioxide point sources.

Reactions in the air partially convert sulfur dioxide to other sulfur compounds such as sulfuric acid and various sulfate salts.

Ozone. Ground level ozone is a photochemical pollutant produced by reactions of volatile organic compounds and nitrogen oxides in ambient air exposed to sunlight. Elevated levels of ozone can cause eye irritation, respiratory difficulties (lung tightness, coughing and wheezing), and vegetation damage. (Ozone is beneficial when it occurs very high in the atmosphere where it absorbs harmful solar ultraviolet radiation and prevents it from reaching the earth's surface.)

The major source of ozone-forming pollutants is motor vehicles. Other sources include gas stations, wood burning, refineries, chemical plants, and residential/commercial use of solvents. In the Puget Sound Region, the highest monitored ambient ozone levels usually occur between May and September. Optimum conditions for high concentrations occur during periods of poor dispersion, when an elevated inversion is present to trap pollutants, accompanied by high ambient temperature and sunshine. Light northerly winds often develop on these hot days, resulting in the highest monitored ozone values well south to southeast of the urban areas from which precursors originate (Enumclaw area and Pack Forest near La Grande).

Ozone levels generally are highest between noon and early evening. After nightfall, the photochemical effect ends and monitored values tend to decline; however, significant ozone levels can on occasion carry over into the early morning.

Lead. Lead ambient air quality standards are intended to prevent human health impacts on the blood, nervous system, and kidneys, particularly for sensitive individuals such as children. Lead emissions to the air in urban areas comes principally from automobile exhaust. Emissions also occur from industries that smelt or process the metal. Lead levels are not measured in the Everett area. In areas where lead concentrations were measured in the Puget Sound Region, levels were lower than the standard. Current lead levels are significantly

lower than lead levels measured in the 1970's due primarily to the gradual elimination of leaded gas.

Nitrogen Dioxide. Nitrogen dioxide is a poisonous, brownish gas. It is a strong oxidizing agent and reacts with water vapor to form corrosive nitric acid. It has been connected to respiratory diseases and plays an essential role in the production of ozone. Nitrogen dioxide is formed as the result of high temperature fuel combustion (sources such as boilers, turbines, and automobile engines) and subsequent atmospheric reactions. For example, nitrogen oxides are produced at the Boeing facility from fossil fuel combustion in three boilers used for heating.

Monitoring for NAAQS Compliance

Combined, PSAPCA and Ecology operate over 30 sampling sites throughout the Puget Sound area related to monitoring air quality. Two monitoring stations have been established in Everett: a PSAPCA station at Hoyt Avenue and 26th Street sampling for particulate matter, sulfur dioxide, and wind direction and speed; and a Department of Ecology carbon monoxide monitoring station near the intersection of Broadway and Hewitt. There are no monitoring sites in the SW Everett/Paine Field Subarea.

PSAPCA publishes a yearly Air Quality Data Summary that provides the results of monitoring. The data in this DEIS is mainly from the 1994 Summary, since the 1995 data has not yet been published.

Everett and Puget Sound Region's Compliance with NAAQS

In specific areas in the past, the Puget Sound region has been designated out of compliance with the standards for carbon monoxide, ozone and particulate matter. The region is in attainment of the standards for sulfur dioxide, lead and nitrogen dioxide. For the three years ending in 1995, the Region did not exceed federal standards for any of the measured pollutants.

Carbon Monoxide and Ozone: Everett lies within the Central Puget Sound's non-attainment area for carbon monoxide. Ambient levels of carbon monoxide have decreased significantly since 1979. During 1992, for the first time in the Puget Sound region, there were no measured carbon monoxide levels that violated the 8-hour average standard of 9 parts per million.

Everett also lies within the Puget Sound's non-attainment area for ozone. After a period of attainment, the region was classified a non-attainment area for ozone in 1990, when ozone measurements downwind of the major Puget Sound urban areas violated the standards. From 1991 through 1995, the Puget Sound region did not exceed the federal standard of 0.12 parts per million.

The PSAPCA Board recently adopted Carbon Monoxide and Ozone Air Quality Maintenance Plans, and has petitioned the U.S. Environmental Protection Agency (EPA) for reclassification to an "attainment area." EPA redesignation to attainment status is expected to occur in Summer, 1996.

PM10: There is no nonattainment area for PM10 in the City of Everett.

Nitrogen dioxide: The Puget Sound region's attainment status, while currently unclassified, is assumed to be better than the NAAQS standard for nitrogen dioxide. Ambient nitrogen dioxide monitoring data collection was recently reinstated in Seattle in 1995.

Sulfur Dioxide: Since 1985, there have been no instances where the measured levels of sulfur dioxide violated any of the ambient air quality standards as measured at the monitoring station at Hoyt Avenue and 26th Street.

Impaired Air Quality Periods (Burn Bans)

The Washington Clean Air Act and DOE implementing regulations enable PSAPCA to declare an "impaired air quality" condition when levels of particulate matter (PM10) or carbon monoxide exceed specific thresholds. The declaration results in a "burn ban" where most indoor burning is banned. Burn bans are generally triggered by PM10 violations. Impaired air quality based upon carbon monoxide conditions virtually never happen.

A PSAPCA ban on outdoor burning (specifically land clearance and yard waste fires) within urban growth areas of King, Pierce, and Snohomish Counties became effective on September 1, 1992. Since outdoor burning is not permitted at any time in the Everett Planning Area, a burn ban only affects the use of fireplaces and wood stoves. (Before outdoor fires were banned in the urban areas of King, Pierce and Snohomish counties, they accounted for about 15 percent of all particulate air pollution in those counties.¹)

Burn bans do not affect industrial and commercial uses.

Burn bans generally occur during the period from October to February when stable weather conditions result in poor dispersion of pollutants. During 1994, no burn bans were called.

PSAPCA Reports Daily Air Quality

PSAPCA uses the national Pollutant Standards Index (PSI) to report daily air quality for the Everett, Seattle and Tacoma areas. The report includes a descriptive term for the daily index value. Any pollutant measurement exceeding the short term national primary standard causes the index value to be in the Unhealthful or Very Unhealthful category. In 1994, Everett had 294 Good, 71 Moderate, and 0 Unhealthful days.

3.5.1.2 Non-criteria Pollutants: Toxic Air Contaminants and Point Sources

Toxic air contaminants (TACs) are non-criteria pollutants which include chemical emissions, some of which are highly carcinogenic even in minute quantities. Ambient air quality standards have not been established for TAC emissions; consequently, ambient air monitoring for TACs is not typically conducted in the Puget Sound Region. However, Ecology and PSAPCA have established Acceptable Source Impact Levels (ASILs) for over 650 TACs. ASILs represent incremental ambient air impact concentrations for air emissions "point"

¹Clear Views, a Quarterly publication of the PSAPCA, Winter 1993

sources, and are based on established workplace exposure standards and an added safety factor. Existing and future TAC emissions sources must meet the applicable ASIL. Sources of TACs include a variety of manufacturing, industrial and commercial operations, such as dry cleaners, chrome plants, autobody shops, etc. The EIS for the Boeing expansion estimated that Boeing would produce about 1,550 tons of TAC emissions per year by 1996 from manufacturing activities. PSAPCA's 1994 Air Quality Data Summary showed that Boeing emitted 488 tons of TACs from large stationary sources in 1994, while Tramco emitted 109 tons, and Crest Cabinets (located at 2902 - 112th SW) emitted 14 tons.

3.5.1.3 New and Modified Sources of Air Pollution - RCW 70.94, Chapter 173-400 WAC, and PSAPCA Regulations I, II, and III

PSAPCA is responsible for permitting all new or modified sources of air pollution in Everett (except pulp mills and aluminum reduction plants, which are permitted by DOE). PSAPCA fulfills its responsibilities by implementing Regulations I, II, and III, which are based primarily on state and federal regulations.

Regulation I

Notice of Construction Permits: PSAPCA requires all proposed new air emission sources to submit a notice of construction (NOC) and application for approval, commonly called an NOC application. All new or modified sources within the region and state must apply best available control technology (BACT) and limit the impact of emissions on ambient air to levels below the ASIL. In addition, new air emission sources must not violate any federally established new source performance standard (NSPS), National Emission Standard for Hazardous Air Pollutants (NESHAP), national ambient air quality standard (NAAQS), and state and local ambient air quality standards.

Regulation I also includes emission standards for opacity, sulfur dioxide, odors, and fugitive dust.

In addition to an NOC permit application, major new sources of air contaminants may be required to submit a prevention of significant deterioration (PSD) permit application to Ecology. The decision to require a PSD permit depends on the type of source and the magnitude of the source's proposed potential emission increases. The PSD application must include a project description, a BACT analysis, an ambient air quality impact analysis, and an additional impacts analysis. Ecology and PSAPCA coordinate their efforts during the application review process when a source is required to submit both NOC and PSD applications.

PSAPCA has identified "insignificant sources," which are exclusions and do not require an NOC. These include uses such as:

- Insecticide, pesticide, or fertilizer spray equipment.
- Laboratory equipment used exclusively for chemical or physical analyses.
- Dryers or ovens used solely to accelerate evaporation.
- Welding, brazing, or soldering equipment.
- Asphalt roofing and laying equipment.
- Restaurants and other retail food-preparing establishments.

- Retail printing operation (not including web presses).
- Spray painting or blasting equipment used at a temporary location.

Registration and Inspection of Air Contaminating Operations and Equipment. Within the Subarea, many different kinds of air contaminating operations and equipment are registered with and regularly inspected by PSAPCA. Among the larger sources of significance to PSAPCA are those emitting five tons or more of volatile organic compounds or toxic air contaminants (TAC) per annum; and those emitting 25 tons or more of particulate matter, oxides of sulfur, oxides of nitrogen or carbon monoxide per annum. For example, the SW Everett/Paine Field Subarea includes:

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| • Achilles, USA | • Intermec |
| • All Fab, Inc. | • Northwest Gears |
| • Associated Sand & Gravel | • Overall Laundry Services |
| • Blue Streak Finishers | • Paine Field Airport |
| • Boeing* | • Panda Mfg. |
| • Community Transit | • Sunwest Aviation |
| • Datacom Technologies | • Tramco* |
| • Fliteline Services | • Tyee Aircraft |
| • Fluke Manufacturing | • Washington State Air National Guard |

*Facilities included in PSAPCA's "major source" operating permit program.

Misc. Regulation I also includes sections on general provisions, civil penalties, enforcement, investigation; continuous emission monitoring and periodic source testing requirements; and outdoor fire and wood stove regulations.

Regulation II

Regulation II deals with volatile organic compound emission standards and deals primarily with gas stations, petroleum refineries, gas terminals and bulk plants, graphic arts, surface coaters, and the aerospace industry. (Seattle, 1991)

Regulation III

Regulation III regulates toxic air contaminants from specific sources (such as dry cleaners, vapor degreasers, and chrome-platers) and other new or existing sources that exceed the allowable source impact levels for over 650 toxic air contaminants.

Regulation III also regulates asbestos removal and demolitions. Prior to most renovation or demolition work, an asbestos survey must be completed and PSAPCA must be notified.

Regulation III states specific rules for various sources of toxic air emissions and use of BACT. The rules are enforced via inspections and fines. (Seattle, 1991)

3.5.1.4 City's Commute Trip Reduction Ordinance (E.M.C. 46.68)

The City's Commute Trip Reduction (CTR) Ordinance was established in 1993 per State requirements to reduce auto-related air pollution, traffic congestion and energy use. It requires that employers of 100 employees or more develop and implement a CTR program that will encourage its employees to reduce vehicle miles traveled (VMT) per employee and single occupancy vehicle (SOV) commute trips. See Section 3.2: Transportation for more detailed information regarding the CTR Ordinance.

3.5.1.5 Odors

Outdoor odors and smoke may be offensive to some people and not to others. Nuisance odors may result from residential activity (e.g. cooking, fireplaces, composting); business and commercial uses (e.g. gas stations, dry cleaners, restaurants); industrial and manufacturing uses (e.g. coffee roasters, large-scale composting, paper processing, food smoking, dog food factories) and other land uses such as wastewater treatment plants. Not all odors indicate the presence of hazardous substances. Odors should not occur when industries are using and maintaining best available control technology (BACT) properly, in accordance with their permit requirements.

The following factors help influence how far from the source odors are detectable:

- temperature of the material
- meteorological conditions, including prevailing winds
- smoke or visible fallout of pollutants/particulate matter
- nearness of human activity and/or sensitive populations
- personal perception

PSAPCA is a local agency responsible for regulating odors and addressing odor complaints. PSAPCA's Regulation I, Section 9.11 regulates emissions that are public nuisances, specifically, those that are "injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property." Section 9.12 prohibits the emission of odor-bearing air contaminants unless best available control technology is used to control the emissions.

3.5.1.6 Complaints

PSAPCA can still regulate non-permitted activities if complaints are filed and can require that improvements be made to reduce impacts. PSAPCA has adopted guidelines to prioritize response when complaints are filed, with the response based upon whether the source is identified and is in progress, the impact of the source on the complainant, and whether the impact is health related.

Odor issues are generally dealt with on a complaint basis, rather than in the permit process, since most sources of concern already exist. The Snohomish Health Department may also get involved in dealing with odor complaints on permits that they have issued on landfills, composting operations, and restaurants.

3.5.1.7 City of Everett Zoning Code

Section 39.140 of the City's Zoning Code states that "any odor which injures or endangers the health or safety of persons or interferes with the use of abutting properties or streets is a violation of this ordinance. Emissions to air shall comply with the standards of the State Department of Ecology and the Puget Sound Air Pollution Control Authority."

The M-1 Office and Industrial Park Zone and M-M Business Park Zone standards require that equipment or vents which generate air emissions shall be located on the opposite side of the building from adjoining residentially zoned properties.

3.5.1.8 Snohomish County Zoning Code

Snohomish County's BP zone includes a standard which states, "Processes and equipment employed and goods processed or sold shall be limited to those which are not objectionable beyond the boundaries of the lot upon which the use is located by reason of offensive odors, dust, smoke, gas or electronic interference."

3.5.2 IMPACTS OF DEVELOPMENT

Note that impacts to air quality from transportation sources is discussed in Section 3.2 Transportation.

It is expected that air quality will be adversely impacted under all alternatives since manufacturing, industrial, and commercial businesses are expected to increase under all alternatives, and many of these businesses will generate air pollutant emissions. In addition, emissions from vehicular traffic will increase. The impacts to air generated within the Subarea will affect an area larger than the land area for which Everett is planning.

Under all alternatives, overall Subarea emissions from business, commercial and industrial uses will increase, most noticeably under the Faster Growth Alternative. However, the types and exact amounts of pollutants of concern to be generated hinge on a big unknown: the type of industries which ultimately will locate here.

Also, it is expected that changes in technology and modifications to industrial processes to control pollutants will occur in the future. These changes may reduce the level of air pollution emissions from industrial-related sources. For example, in their 1991 EIS, Boeing identified several measures they were taking to reduce emissions, including phasing out use of methylene chloride, reduction in use of freon 113, reduction in emissions from silk-screen washing, better emission control on degreasing equipment, and use of high-transfer-efficient painting of aircraft. Boeing still expects emissions to increase based upon expanded activity on their site, but emissions will not increase proportionally to the expanded activity.

Through the Notice of Construction permit process, most industrial emissions are regulated by PSAPCA or the Department of Ecology. We anticipate that under all alternatives, permitted emission levels will not result in additional non-compliance with any air quality standards.

3.5.2.1 Stationary vs. Mobile Pollutant Sources

Based upon regional air quality data, some of which is dated (1988), it is expected that vehicular emissions will be the primary source of increased concentrations of air pollutants in the Subarea. See the Transportation section of this EIS for an analysis of the air quality impacts that will result from the transportation systems.

Stationary sources of criteria pollutant emissions include large stationary point sources (such as industrial boilers, factories for forest, metal and cement products, refineries, etc.) and stationary area sources (small boilers, slash burns, residential heating, etc.). In 1988, manufacturing operations accounted for less than one-third of emissions of oxides of sulfur and toxic air contaminants (TAC) in the Puget Sound Region and only about 3% of particulates.

Transportation (mobile) sources account for the bulk of regional emissions for the critical pollutants including VOC and nitrogen oxides, carbon monoxide and particulates. Table 3.5-2 identifies the amounts of pollutants by source for carbon monoxide, nitrogen oxides, and volatile organic compounds (PSAPCA, 1994). Table 3.5-3, which is excerpted from the Final EIS for Vision 2020, Puget Sound Council of Governments, provides 1988 regional data for sources of PM10, SOx, TAC, and TSP.

**Table 3.5-2
1994 Emissions by Source**

Source Category	CO	NOx	VOC
Large Stationary Sources	3%	7%	2%
Small Stationary Sources	12%	6%	22%
On-road Mobile Sources	66%	51%	34%
Non-road Mobile Sources (boats, lawnmowers, aircraft, etc.)	19%	36%	12%
Biogenics (emissions from trees, crops and vegetation)			30%
TOTAL	100%	100%	100%

**Table 3.5-3
Stationary Source Share of 1988 Air Pollutant Emission Estimate**

EMISSION SOURCE	SOx	TSP*	PM10	TAC
Stationary Point Sources	33%	3%	3%	28%
Stationary Area Sources	18%	17%	32%	57%
Transportation Area Sources	49%	80%	64%	15%
All Sources	100%	100%	100%	100%

(Source: Gruen Associates 1990, based on PSAPCA 1989)

*Total suspended particulate matter

While this regional data does not specifically address air quality in the Subarea, it reflects the potential air quality impacts from transportation sources.

3.5.2.2 Construction Impacts

Dust from demolition, grading and construction activities will temporarily increase particulate matter and decrease ambient air quality in the vicinity of construction areas. In addition, gasoline and diesel powered machinery and equipment used during construction activities will discharge carbon monoxide.

3.5.2.3 Odors

Increases in Subarea emissions (both criteria pollutants and others) from commercial, office and manufacturing uses may create the potential for odors to be detected in the surrounding residential areas and by employees within the Subarea.

As noted above, PSAPCA permit requirements governing emissions to the outside air should minimize future odor problems. However, some odors may still be offensive to specific individuals working in or residing near Subarea activities such as restaurants, diesel engines, manufacturing of products using fiberglass resins and varnishes, painting activities, bakeries, breweries and wineries, dog food manufacturing, fish processing and smoking, incinerators, etc. Some of these uses are currently prohibited in the M-1 and M-M zoned areas of SW Everett, which are the areas closest to residential zones. Snohomish County's BP zone also states that "Processes and equipment employed and goods processed or sold shall be limited to those which are not objectionable beyond the boundaries of the lot upon which the use is located by reason of offensive odors, dust, smoke, gas or electronic interference."

Some permitted/conditional uses are not being covered in this DEIS due to potential odor concerns, such as composting facilities, biosolids/sludge utilization, and fertilizer manufacturing.

3.5.2.4 Miscellaneous

Similarly, Subarea activities in compliance with PSAPCA emission control requirements should not result in nuisance-type problems involving dust, smoke, and fallout of pollutants/particulate matter, e.g. restaurants, manufacturing activities, incinerators, etc. Note that some permitted/conditional uses are not being covered in this DEIS due to potential air quality impacts, including new aggregate extraction operations, cement and asphalt manufacturing, and incinerators. These types of uses will be required to complete additional SEPA review including air quality analysis. (See Section 3.1 for a list of uses covered in this DEIS.)

3.5.3 Potential Thresholds

All permitted future uses must obtain a Notice of Construction (NOC) as applicable and use best available control technology. As necessary, air quality studies may be required by PSAPCA in order to obtain permits.

Uses not being covered in this EIS are listed in Table 3.1-1 in the Land Use Section. Examples of uses that are not being covered because they may have significant air quality impacts are mining activities, cement and asphalt manufacturing, composting facilities, dog and cat food manufacturing, fish processing, and landfills. Additional SEPA analysis will be required for these uses.

3.5.4 Potential Measures To Reduce the Impacts of Development

1. All developments must comply with all applicable PSAPCA regulations.

When applicable, the applicant must obtain a Notice of Construction (NOC) from PSAPCA. Construction and operation of the site must comply with all requirements of the NOC, including use of best available control technology. Air quality analyses may be required by PSAPCA to evaluate compliance with regulations. Table 3.1-1 in the Land Use Section of this document includes an asterisk by the names of uses that are traditionally regulated by PSAPCA.

Permits must be obtained from PSAPCA for demolitions and for renovations/demolitions involving asbestos.

2. The Washington State Clean Air Act (Chapter 70.94 RCW) requires the use of all known, available, and reasonable means of controlling air pollution, including dust.
3. City streets must be kept clear of dirt and debris at all times during construction. Dust suppression and street cleaning must occur as directed by the Public Works Inspector.
4. The City's Public Works Standards and Specifications Manual requires that rock stabilized temporary entrance pads be provided to construction sites. The construction entrances must be a minimum of 50 feet long and 15 feet wide and be constructed of large rock (quarry spalls) a minimum of 8 inches thick. (Oil treated accesses are not permitted.) Where the entrance is not sufficient, Public Works requires that trucks exiting the site have their tires and wheels cleaned by sweeping, brushing, or washing prior to entering the public right-of-way.

The City could require paved construction entrances. In addition, the City could increase enforcement of dust suppression requirements during demolition, grading and construction activities, including watering sites, washing construction vehicles tires and frames prior to vehicles leaving the site, and requiring that trucks carrying soil be covered.

5. Appropriate emission control devices should be installed on all construction equipment.
6. At time of permit issuance, contractors could be reminded that construction equipment should be turned off when not in use for long periods of time.
7. The City and the Economic Development Council could direct their economic development efforts towards attracting "clean" commercial, industrial, and manufacturing uses to the Subarea.
8. Buffers provided adjacent to residential areas will help minimize potential air quality impacts by increasing the distance between the source of pollution or odors and receivers. (See Section 3.1: Land Use)
10. Uses that result in a large number of complaints to PSAPCA even though businesses comply with existing regulations could be prohibited or limited within specific distances of residential areas, institutional uses (schools), and/or offices, including industries that use fiberglass resin and varnish, spray painting (including paint hangers and outdoor spray painting), metal finishing, breweries and wineries, and loading areas (diesel emissions).

For example, these and similar uses could be prohibited within 1,000 to 1,500 feet of residential areas. Regulations should be developed prior to adoption of the Subarea Plan to more specifically identify uses that should be restricted and separation distances. Regulations could consider the frequency and magnitude of the use or activity.