Michigan Content Standards and Benchmarks
Correlations for the Air Quality Unit
X = Addresses/Supports DRAFT MARCH 2008

		1. What Gets into the Air?	2. Why Should We Be Concerned about Air Quality?	3. What are the Sources of Air Pollution?	4. How Can We Monitor Air Quality?	5. How Can We Tell What the Quality of the Air Is Today?	6. What Has Been Done About Air Pollution?	7. What Can We Do About Air Pollution?	8. How Can Our Actions Impact the World?
Science	S.IP.M.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.	X		X	X	X		X	X
	S.IA.M.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.	X		X	X	X		X	X
	S.RS.M1 Reflecting on knowledge is the application of scientific knowledge to new and different situations. Reflecting on knowledge requires careful analysis of evidence that guides decision-making and the application of science throughout history and within society.						X	X	X
	P.PM.07.23 Illustrate structure of molecules using models or drawings.	X							
	P.PM.07.24 List examples of physical and chemical properties of elements and compounds.	X	X						
	P.CM.06.11 Describe and illustrate changes in state, in terms of the arrangement and relative motion of atoms and molecules.	X							
	P.CM.06.12 Explain how mass is conserved as it changes from state to state in a closed system.	X							
	E.ES.07.41 Explain how human activities change the surface of the earth and affect the survival of organisms.		X						X
	E.ES.07.42 Describe the origins of pollution in the atmosphere, geosphere, and hydrosphere (car exhaust, industrial emissions, acid rain and natural sources) and how pollution impacts habitats, climatic change, threatens or endangers species.	X	X	X	X	X	X	X	X
	E.ES.07.71 Compare and contrast the difference and relationship between weather and climate.								X
	E.ES.07.72 Describe how different weather occurs due to the constant motion of the atmosphere from the energy pf the sun reaching the surface of the earth.				X	X			X
	E.FE.07.11 Describe the atmosphere as a mixture of gases.	X	X	X		X			
	E.FE.07.12 Compare and contrast the composition of the atmosphere at different elevations.	X	X						
	L.EC.06.41 Describe how human beings are part of the ecosystem of the Earth and that human activity can purposefully, or accidentally, alter the balance of the ecosystem.	X	X	X			X	X	X
	L.E.C.06.42 Predict possible consequences of overpopulation of organisms, including humans (for example: extinction, resource depletion, climate change, pollution	X	X	X			X	X	X
	HS.C5.2A Balance simple chemical equations applying the conservation of matter.	X							
	HS C5.2B Distinguish between chemical and physical changes in terms of the reactants and products.	X	X						
	HS.C5.7B Predict products of an acid-based neutralization.						X		
	HS.C5.7H Explain why sulfur oxides and nitrogen oxides contribute to acid rain.		X				X		
	HS.E2.2D Identify the main sources of energy to the climate system.								X
	HS.E2.3D Explain how carbon moves through the Earth system and how it may benefit or harm society.	X	X						X
	HS.E2.4B Explain how the impact of human activities on the environment can be understood through the analysis of interactions between the four Earth systems.	X	X	X		X			X
	HS.E5.4 Climate Change (many portions of this relate to Lesson 8)								X
	HS.B3.4C Examine the negative impact of human activities.	X	X				X	X	X

	HS.B3.4D Describe the greenhouse effect and list possible causes.								X
	HS.B3.4E List the possible causes and consequences of global warming.	X	X						X

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Social Studies	6-H1.4.3 Use historical perspective to analyze global issues faced by humans long ago and today.	X					X		
	6-G2.2.2 Explain that communities are affected positively or negatively by changes in technology.	X					X	X	X
	6-G3.1.1 Construct and analyze climate graphs for two locations.								X
	6-G5.1.1 Describe the environmental effects of human action on the atmosphere, biosphere, lithosphere and hydrosphere.	X	X	X	X	X	X	X	X
	6-G6.1.1 Contemporary investigations – Conduct research on contemporary global topics and issues, compose persuasive essays, and develop a plan for action.							X	X
	6-C4.3.2 Explain the challenges to governments and the cooperation needed to address international issues in the Western Hemisphere.						X	X	X
	6-P3.1.1 Clearly state an issue as a question or public policy, trace the origins of the issue, analyze various perspectives, and generate and evaluate alternate resolutions.						X	X	X
	6-P4.2.1 Demonstrate knowledge of how, when, and where individuals would plan and conduct activities intended to advance views in matters of public policy, report the results, and evaluate effectiveness.							X	X
	7-H1.1.1 Explain why and how historians use eras and periods as constructs to organize and explain human activities over time.						X		
	7-H1.2.6 Identify the role of the individual in history and the significance of one person's ideas.						X		
	7-G2.2.2 Explain that communities are affected positively or negatively by changes in technology.	X					X	X	X
	7-G5.1.1 Describe the environmental effects of human action on the atmosphere, biosphere, lithosphere and hydrosphere.	X							X
	7-G6.1.1 Contemporary investigations – Conduct research on contemporary global topics and issues, compose persuasive essays, and develop a plan for action.							X	X
	7-C4.3.1 Explain how governments address national issues and form policies, and how the policies my not be consistent with those of other countries.						X	X	X
	7-C4.3.2 Explain the challenges to governments and the cooperation needed to address international issues.								X
	7-P3.1.1 Clearly state an issue as a question or public policy, trace the origins of the issue, analyze various perspectives, and generate and evaluate alternate resolutions.						X	X	X
	7-P4.2.1 Demonstrate knowledge of how, when, and where individuals would plan and conduct activities intended to advance views in matters of public policy, report the results, and evaluate effectiveness							X	X
	8-P3.1.1 Clearly state an issue as a question or public policy, trace the origins of the issue, analyze various perspectives, and generate and evaluate alternate resolutions.						X	X	X
	8-P4.2.1 Demonstrate knowledge of how, when, and where individuals would plan and conduct activities intended to advance views in matters of public policy, report the results, and evaluate effectiveness							X	X