

“That the Environmental Protection Agency would set up a permanent air quality monitoring station at a representative location in Cork Harbour. That this air quality monitoring station would be capable of measuring concentrations of all the parameters for which limit values in ambient air have been set by Directive 2008/50/EC, including particulate matter. Cork Harbour is one of the most important industrial areas in Ireland, significant at a worldwide level within the pharmaceutical industry and a major port. Although Cork Harbour and its immediate environs is home to 44,000 people and an employment hub for over 10,000 people, there is currently no ambient air monitoring in Cork Harbour.”

There are two European directives, one dating from 2001 and the other from 2008, which are designed to look after the quality of the air we breathe. Every time we breathe we are in direct contact with the external environment. The lung, in fact, is really the only one of our organs that is in direct contact with the environment.

These European directives require all Member States to ensure that the concentration of regulated pollutants in air should be publicly available. The EPA has this responsibility in Ireland. It runs the National Ambient Air Quality Network.

To do this, the EPA divides the country into four zones: A – Dublin; B – Cork; C – towns with less than 15,000 people and D – rural areas. They set up air monitoring stations in each of these zones, every hour they measure the concentrations of pollutants in air which are harmful to health (NO₂, ozone, SO₂, PM₁₀ and PM_{2.5}) and they report on the quality of air as being either good, fair, poor or very poor.

There are 4.7 million people living in Ireland. We have 31 monitoring sites, 15 of which are active. In Northern Ireland, by comparison, there are 1.7 million people but 20 monitoring sites are active.

But well, well worse is that only 3 of those stations are capable of reporting real time concentrations of standard parameters for particulate matter. There is one of these stations in Ennis, one in Claremorris and one in Rathmines, Dublin.

Particulate matter is of great concern. We measure it in two categories: PM₁₀ and PM_{2.5}. PM₁₀ particles are the bigger of the two but to put it in perspective, they are about one fifth of the width of a human hair. PM_{2.5} particles is about one twentieth of the width of the human hair. PM_{2.5} can get well into the lungs. These are the most damaging. They cause death. Very small particles can nick the arteries. Fat builds up around this. Causes cardiovascular effects and stroke. People with asthma are particularly vulnerable to their effects. Most recently, PM_{2.5} is being linked to cognitive effects and autism. Recently some WHO guidelines about particulates were published. They are coming in with half of the PM_{2.5} level that is in EU legislation.

So if you look up the EPA website to see what the air quality is like in your area of Cork, you generally see that it is good. But there are only two monitoring stations in Cork – one near the Kinsale Road roundabout and the other at Heatherton Park, on the other side of the Kinsale Road landfill site. Further, those stations cannot do real time monitoring of particulate matter. Either PM₁₀ or PM_{2.5}.

Several miles away from the Kinsale Road roundabout, we have one of the most industrial areas in Ireland: the Strategic Employment Area of Ringaskiddy. 44,000 people live within 5 km of Ringaskiddy. Significant towns of Carrigaline, Midleton, Cobh. Smaller towns of Passage West, Monkstown, Ringaskiddy, Shanbally, Whitegate, Aghada, Crosshaven ... More than 10,000 people are working in the industries in Ringaskiddy. There are stacks, widespread chemical and pharmaceutical manufacture, & there is shipping, there is lots and lots of traffic. But the only time there has been air monitoring in any part of Cork Harbour was between 21st August 2007 and 14th March 2008. I brought a motion to Passage West Town Council requesting that the EPA would deploy their mobile monitoring unit to Cork Harbour.

That monitoring unit wasn't able to test for all of the 5 parameters of concern to human health. It could test for PM₁₀, but not for PM_{2.5}. It was stationed in Monkstown, not in Ringaskiddy. It was close to the R610, but not the N28, along which children study in schools and communities live. Yet, it found that the concentrations of PM₁₀ were high. If levels of PM₁₀ were high, levels of PM_{2.5} which the mobile station was unable to measure, were likely to have been higher.

The recommendation at the end of this 7 month period was that levels of PM₁₀ would need to be monitored continuously.

There has been no further ambient air monitoring in Cork Harbour.