

DANGERS/IMPACTS OF INDUSTRIALIZATION AIR, WATER AND NATURAL RESOURCES

While the TCEQ and other regulatory permitting agencies will only look at individual permits to determine if they meet the air and water quality standards and/or assess environmental impacts of each project, their cumulative impacts are not considered. These are some of the dangers and impacts of industrialization; each contributes to degradation of the region; together, they are an environmental disaster.

Air we breathe – Current and future industries will emit varying amounts of the same type of air contaminants including carbon monoxide, greenhouse gases, nitrogen oxides, organic compounds, and particulate matter, including particulate matter with diameters of 10 microns or less (PM10) and 2.5 microns or less (PM2.5), solvents, ammonia, ethylene oxide, hydrogen sulfide, sulfur dioxide, fluorides, lead, and sulfuric acid mist. Each will be allowed to emit thousands of tons of contaminants. Greenhouse gas emissions are staggering. For example, Exxon/SABIC will emit 3,000,000 tons each year. When Cheniere has all units on line, it is estimated they will emit well over 6,000,000 tons per year.

Industrial Wastewater Discharge Temperature – Each will be allowed to discharge industrial wastewater into the bays and waterways. The temperature of Exxon's discharge is 110 degrees when it hits the La Quinta Channel. What temperatures will the others present when they hit the bays? Aquatic life is sensitive to temperature changes and Corpus Christi Bay has recurring problems with algae bloom due to bacterial growth.

Location of Industrial Wastewater Discharge – Each new industry will have to decide where to discharge their wastewater. All of the current industries discharge into Corpus Christi Bay. Exxon/SABIC will do the same, dumping 9.3 Million gallons of liquid chemical waste into the bay each day. Will new industries do the same? Will their discharge contain as many contaminants, oil and grease, as Exxon's? What will be the cumulative effect of these new discharges on the bay system? Or, will they choose Copano Bay? For instance, Steel Dynamics located outside of Sinton may choose to send their wastewater into Chiltipin Creek that joins Aransas River just before emptying into Copano Bay. If heavy industry locate in the newly acquired Port property, McCampbell Slough will provide an easy discharge into Port Bay only five miles from the site.

It is important to note that the only wastewater discharges that flow into Copano Bay at present are municipal wastewater discharges. No industrial discharges are currently present.

Location of Process and Equipment Stormwater Discharges – Each new industry will have to route the stormwater off their property and into a drainage system that will ultimately enter the bays and waterways. Often overlooked, stormwater from industrial facilities pose a significant threat as rain water flows across equipment, gathering both chemical and product waste, and sending it downstream. Most of this stormwater has previously emptied into Corpus Christi Bay. TCEQ allowed Exxon/SABIC to direct two outfalls of stormwater into drainage ditches that flow into Copano Bay.

Stormwater Flooding – The land being targeted for industrial build-out is farmland. Good rains are absorbed, but heavy rains create flooding problems in many communities, as drainage systems overflow. The Exxon/SABIC main facility site will turn 900 acres of farmland into impervious concrete, steel, and asphalt where rain water will have nowhere to go except into drainage ditches. Their heavy haul road, 4 miles long and 140 feet wide will require drainage somewhere. The San Patricio County Municipal Water District is concerned with potential flooding. Imagine how much impervious surface will be created by Steel Dynamics, and other new industry that will be located in the industrial zone. As we know, it doesn't take a named tropical system to release heavy amounts of rain in the coastal bend area. Where will all the water flow? And how will this impervious surface exacerbate flooding from another Harvey?

Polyethylene Pellets – Much has been said about these pellets and how dangerous they are to birds and aquatic life. The debacle at the Formosa Plastics Plant in Point Comfort is not an anomaly; it is what happens with the manufacturing of these poison pills. Because new and existing gas pipelines provide the feedstock for the production of these pellets, facilities like the Exxon/SABIC petrochemical plant can be anticipated, and the proliferation of these pellets throughout the region is a very real danger.

Water Use – New industry will require enormous amounts of fresh water to operate. Exxon/SABIC will require 20 million gallons of water per day. This one facility will use the same amount of water used currently by approximately 60,000 residents, agricultural, commercial and industrial users served by the San Patricio County Municipal Water District. Steel Dynamics near Sinton will require 6 million gallons of water per day. If another petrochemical plant locates in the region, it can be anticipated it will require the equivalent of the Exxon/SABIC operation. This industrialization increases the demand on our existing regional water supply that supports a population of 500,000 and cannot be sustained without additional water supply.

Seawater Desalination – While seawater desalination has been discussed for decades, the recent interest was initiated by “port industries”. When industry was required to curtail water usage during the most recent severe drought, cutting into corporate profits, they pushed for seawater desalination. They agreed to pay into a fund to support some of the costs but only if they received a non-curtailement agreement, i.e. in times of drought, they get 100% of their water needs filled. There can be no debate that the movement toward seawater desalination is to fulfill industrial demand, both present and future. Virtually every drop of new water from any desalination facility will be consumed by industry. So, desalination is a catalyst for the industrialization of the region and the negative environmental impacts associated with it.

Desalination Process – The seawater desalination process itself poses a significant threat to the ecosystem. As currently contemplated, there could be three facilities built, one on Harbor Island, one in the inner harbor, and one on the La Quinta Channel. Whether it be one, two or three, the intake and discharge locations will each have a devastating effect on aquatic life within our closed bay system, where the only water exchange between the bays and the Gulf of Mexico occurs through the ship channel. From dangers to larvae and other aquatic life getting caught in the intake, to the discharge of brine plumes that choke aquatic life and seagrasses, the threats are

real. We all recognize the need for alternative sources of fresh water to support population growth. And perhaps a solution can be achieved, but for what purpose, and at what risk?

Maritime Industry – For over a century, the maritime industries have been present here. But, the race for profits in the oil and gas industry has resulted in a desire to move the products worldwide at a faster pace. Industry's solution is the introduction of Very Large Crude Carriers into the bay ecosystem. These VLCCs and the terminals required to berth them will be located primarily on Harbor Island and the La Quinta Channel. These massive tankers will carry 2,000,000 barrels of crude. Their number and frequency will disrupt maritime traffic, both commercial and recreational, as they move through the narrow ship channel. Their wake will damage wetlands. One spill can destroy an entire ecosystem because it won't disperse in a shallow bay system as it might in open ocean. The effects are multiple and impactful on marine life, not to mention the tourist industry.

Channel Dredging – The Port of Corpus Christi wants to be the Port of the Americas. In its own quest for prestige, and to support the oil and gas industry's race for profits, it wants to dredge the channel to 75 feet to accommodate the VLCCs. Doing so will allow the VLCCs to berth and fill up before heading out to sea. An Environmental Impact Statement will be prepared by the Army Corp of Engineers but there is grave concern over destruction of the sea bottom, the dispersal of silt and sediment, the danger to aquatic life in the channel, and changes in tidal flows throughout the bay systems.

Massive Infrastructure Projects – The industrialization of the region will result in the construction of new rail systems and railyards; new roads; new pipelines for crude, natural gas, and water. Increases in heavy equipment and truck traffic, noise, light, and mobile air toxins will contribute to the degradation of the area for humans and wildlife alike. Property rights are forsaken as the oil and gas industry moves pipelines through land with impunity.

And, we cannot forget the enormous amount of power that must be generated to achieve the industrialization of the area. Seawater desalination facilities alone require large amounts of power to operate. One can only imagine the requirements of each industry as they locate here. Those new sources of power will, in turn, generate their own sources of health hazards and environmental impacts.