

APES- Internet Activity “Toxics in Your Neighborhood”

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Purpose: *Research and analyze local environmental and toxicology risks, determine their sources, determine environmental and potential health impacts, and examine potential solutions.*

Go to the website: <http://scorecard.org>

1: Type in your **zip code**

-92123

2: Under the “**toxics**” category- click on the link, “**See how your county stacks up**”.

List the 6 categories and relative percentage ranking for San Diego County.

1. Total Environmental Releases: 70-80%
2. Cancer Risk Score: 70-80%
3. Non-Cancer Risk Score: 60-70%
4. Air Releases of Recognized Carcinogens: 80-90%
5. Air Releases of recognized Developmental Toxicants: 60-70%
6. Air Releases of Recognized Reproductive Toxicants: 70-80%

Did the results surprise you at all, why or why not?

-The results did surprise me because the air feels clean to breathe, and there isn't any industry that I know of that pollutes the air in the area.

3: Click on the “**other chemical release and waste management attributes**” link. List the categories for which San Diego falls in the Dirtiest/Worst counties in the United States (**80-100%**). *How do you account for these levels being so high?*

-San Diego falls under the dirties countries category in: water releases, off-site transfers, total production-related waste, air releases of recognized carcinogens, air releases of suspected carcinogens, air and water releases of suspected cardiovascular or blood toxicants, air releases of suspected endocrine toxicants, and air releases of suspected neurotoxicants. These high statistics may be the product of industry, and emissions that come from the manufacturing process that are pumped into the sky.

4: List the categories for which San Diego scores well in terms of environmental pollutants (**less than 20%**). *Why do you think the levels of these pollutants are so much better here in San Diego? Explain.*

-San Diego falls under the cleanest countries category in: water releases of suspected carcinogens, water releases of suspected developmental toxicants, water releases of suspected gastrointestinal or liver toxicants, air releases of suspected musculoskeletal toxicants, water releases of suspected neurotoxicants, water releases of suspected reproductive toxicants, and water releases of suspected skin or sense organ toxicants. These levels may be better in SD due to the lack of waste dumps in the water, and lack of industry that emits these specific toxicants.

5: Click the back button on your browser to get back to the pollution report card for your zip code. Click on the link **“the top polluters” in your county**. List the top 10 polluters in San Diego County. *What do you know about these companies? What do they manufacture?*

1. USMC MCB Camp Pendleton – Marine Corp base; armaments
2. NASSCO – Shipbuilding industry; ships and steel
3. Watkins MFG – Based in Vista, CA; hot tubs
4. Southwest Marine INC – Shipbuilding industry; ships
5. Sony Electronics SD – International business; electronics and appliances
6. US Navy NAS North Island – Navy base; armaments
7. Duke Energy South Bay Power Plant – Fossil fuel plant; power
8. Signet Armorlite INC – Kodak branch; lens
9. Caldera Spas INC – Spa wholesale; hot tubs and cosmetic appliances
10. ARCO SD Terminal – Gas reserve; gas

6: Go back to the report card page and click on the **“top chemicals released” link**, and list the top 5 chemicals released in San Diego.

1. Nitrate Compounds
2. Lead Compounds
3. N-Butyl Alcohol
4. 1, 2, 4-Trimethylbenzene
5. Copper

7: Go back to the report card page and locate the air pollution section. Click on the **“How many days a year is your air unhealthy”?** link. How many days did San Diego have **good air quality? 44. Moderate? 50. Unhealthy? 1.**

List the three major pollutants you think are responsible for reduced air quality in San Diego.

-Manufacturing depots, military bases, and gas-related industries

8: Go back to the report card page and find the water quality section. Click on the **“See how your county’s water quality stacks up” link**. *What are the two categories and percentages listed?*

-Percentage of surface waters with impaired or threatened uses: 80-90%;
Number of impaired waterbodies: 70-80%

9: Scroll down the page and locate the top two pollutants and percentages for **(rivers, lakes and creeks) category**, the **(lakes, reservoirs, and ponds) category** and **(estuaries, bays and coasts) category**. *List some ideas as to the source of the potential water pollutants here in San Diego.*

-Rivers/lakes/creeks: Pathogens and Sediments; lakes/reservoirs/ponds: Nutrients and Salinity; estuaries/bays/coasts: Pathogens and Nutrients. Pathogens and nutrients may have been introduced by organisms that carry disease. Salinity may come from the sea.

10: Go to the URL: <http://www.sdcountry.ca.gov/deh/>. This site is the San Diego County Office of Environmental Health.

Describe the role of this office:

-The OEH regulates pollution, quality of life, and safety. It also educates the public to raise awareness of environmental problems that may inflict the population.

11: Type or click on the URL: <http://www.sdcounty.ca.gov/deh/hazmat/hhw.html>. Read the information on **“What is Hazardous Waste?”** and list 8 common household items that are classified as hazardous waste. *How many of these do you have in your house? Indicate which are in your home. (*)*

-Acrylic paint, gasoline, treated wood, charcoal, epoxy, nail polish, fertilizers, shampoo; I have all of these in my home, mostly in my garage or furniture (treated wood).

12: Click on the hazardous materials pollution prevention link: http://www.sdcounty.ca.gov/deh/hazmat/pollution_prevent.html. *In your opinion, what three pieces of prevention advice are the best/most relevant? Why?*

-I believe that choosing less toxic alternatives would be the best prevention method because it completely negates any risk of toxins ever coming in contact with anybody. It could also discourage manufacturers to make more healthy goods, if more people switch to healthier alternatives.

13: Click on the **Household Hazardous Waste Disposal Facilities** link and list 3 certified disposal sites in San Diego.

-San Diego G&E, Frontier Freight, and Nexon Corporation.

14: Go to http://www.sdcounty.ca.gov/deh/hazmat/chd_hhw_sharps.html. *What are sharps? How and where should sharps be disposed of? What are some dangers sharps present?*

-Medical waste such as used hypodermic needles; sharps are disposed of in containers in medical offices after use; disease transmission

15: Go to <http://www.earth911.org/master.asp>. Look around the page and do a little research on **electronics and battery hazardous waste**. *What are some of the problems with these types of waste? What are the recycling/disposal options?*

-E-waste can poison the air and water supply through the process in which e waste goes through in order to be disposed of (which emits fumes and chemicals).

Conclusion: *Write a conclusion about your reaction to this information. Were you surprised? What bothers you most? What are some potential solutions?*

-I was very surprised when I looked at San Diego's pollution ratings, since I haven't noticed any pollution or dirtiness in the air during my life here. What bothers me the most, however, is how unaware other people could potentially be, since some are still as unaware of the pollution in the air as I was before reading these statistics. I believe that action should be taken in the form of education in order to raise awareness to the problem – people will not act if they don't know how bad the situation is. This awareness could cause protests and further government action to be taken upon that focuses on finding these toxic emissions and cleansing the air.