

ATTACHMENT 1

Figure Showing Locations for Chemical Sampling of Sand



Town of Surfside

Address Locations



Project 066-5355 Print Date: 2/12/2014

J:\Atlas\Surfside\MXD\2014\Surfside Address Map TS-14-01_20140220v1.mxd



ATTACHMENT 2

References Cited

ATTACHMENT 2

References Cited

- Adams, M.A. et al. 1994. Dietary intake and hazards of arsenic. Chapter 4. In: Chappell, et al. (eds). Arsenic: Exposure and Health. Science and Technology Letters, Essex, UK.
- American Cancer Society. 2013. Radon. Available on the website located at <http://www.cancer.org/cancer/cancercauses/othercarcinogens/pollution/radon>.
- ATSDR (Agency for Toxic Substances and Disease Registry). 1990. Case Studies in Environmental Medicine: Arsenic. Atlanta, GA. June, 1990.
- ATSDR (Agency for Toxic Substances and Disease Registry). 2007. Toxicological Profile for Arsenic. Atlanta, GA. August, 2007.
- Barringer, J.L. et al. 2013. Arsenic in New Jersey Coastal Plain Streams, Sediments, and Shallow Groundwater: Effects of Different Geological Sources, and Anthropogenic Inputs on Biogeochemical and Physical Mobilization Processes. Prepared in cooperation with the NJ Department of Environmental Protection. Scientific Investigations Report 2013-5107.
- Borum, D.R. and C.O. Abernathy. 1994. Human oral exposure to inorganic arsenic. Chapter 3 in Chappell et al. (eds.). Arsenic: Exposure and Health. Science and Technology Letters. Essex, UK.
- Boyce, C.P. et al. 2008. Probabilistic analysis of human health risks associated with background concentrations of inorganic arsenic: Use of a margin of exposure approach. Human and Ecological Risk Assessment 14: 1159-1201.
- Brinkman, R. and J. Ryan. 1998. Background concentration of metals in Florida soils. Florida Center for Solid and Hazardous Waste Management, Gainesville, FL. Report #97-6.
- Cai, Y., Cabrera, J.C., Georgiadis, M., et al. 2002. Assessment of arsenic mobility in the soils of some golf courses in South Florida. Sci. Total Environ. 291:123-134.
- Chen, M., L.Q. Ma and W.G. Harris. 1999a. Baseline concentrations of 15 trace elements in Florida surface soils. Journal of Environmental Quality. 28(4): 1173-1181.
- Chen, M., L.Q. Ma, W.G. Harris and A.G. Hornesby. 1999b. Background concentrations of metals in Florida surface soils. Taxonomic and geographic distributions of total-total and total-recoverable concentrations of selected trace metals. Florida Center for Solid and Hazardous Waste Management, Gainesville, FL. Report #99-7

- Chen, M, L.Q. Ma, C.G. Hoogeweg and W.G. Harris. 2001. Arsenic background concentrations in Florida, U.S.A. surface soils: determination and interpretation. *Environmental Forensics* 2: 117-126.
- Chen, M., Ma, L.Q., Harris, W.G. 2002. Arsenic concentrations in Florida surface soils: Influence of soil type and properties. *Soil Sci. Soc. Am. J.* 66:632-640.
- DEP (Florida Department of Environmental Protection). 2005. Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C. February, 2005.
- DEP (Florida Department of Environmental Protection). 2006. Rails to trails program assessment guidelines. Presented by Ligia Mora-Applegate. May 23, 2006.
- DEP (Florida Department of Environmental Protection). 2014. Correspondence and technical reports related to sand testing. April-May 2014.
- FDOH (Florida Department of Health)/ATSDR (Agency for Toxic Substances and Disease Registry). 1996a. Health Consultation. Barker Chemical Site, Inglis, Levy County, Florida. August 8, 1996.
- FDOH (Florida Department of Health)/ATSDR (Agency for Toxic Substances and Disease Registry). 1996b. Exposure Investigation Report, Barker Chemical Site, Inglis, Levy County, Florida. August 13, 1996.
- FDOH. 2013. Radon Frequently Asked Questions. Available on the website located at <http://www.floridahealth.gov/healthy-environments/radon/radon-faq.html>.
- FDOH (Florida Department of Health). 2014. E-mail from Dr. Samir Elmir, Miami Dade Health Department, to Michael P. Crotty, Town Manager, Town of Surfside, regarding arsenic found in beach sand at the Surf Club. May 14, 2014.
- Gartrell, M.J. et al. 1986. Pesticides, selected elements, and other chemicals in adult total diet samples, October 1980-March 1982. *J. Assn. Off. Anal. Chem.* 69:146; as cited in ATSDR, 2007.
- Gustavsson, N. et al. 2001. Geochemical Landscapes of the Conterminous United States – New Map Presentations for 22 Elements. U.S. Geological Survey Professional Paper 1648. November, 2001.
- Hughes, M.F. et al. 2011. Arsenic exposure and toxicology: A historical perspective. *Toxicological Sciences* 123(2): 305-332.
- Lunde, G. 1977. Occurrence and transformation of arsenic in the marine environment. *Environmental Health Perspectives* 19: 47-52.
- Ma, L.Q., F. Tan, and W.G. Harris. 1997. Concentrations and distributions of eleven metals in Florida soils. *Journal of Environmental Quality*. 26(3): 769-775.

- Mayorga, W. 2004. Memorandum from Wilbur Mayorga, Pollution Remediation Section, to Jose Gonzales, Pollution Control Division, regarding natural background soil concentrations for the barrier islands of Miami-Dade County. November 7, 2004.
- Mayorga, W. 2014. Personal communication. May, 2014.
- Miami-Dade County. 2014. Miami-Dade County Anthropogenic Background Study. Miami-Dade Environmental Monitoring and Restoration Division. April 3, 2014.
- Moore, J.W. and S. Ramamoorthy. 1984. Heavy Metals in Natural Waters. Springer Verlag. New York, NY.
- Neff, J.M. 1997. Ecotoxicology of arsenic in the marine environment. *Environ. Toxicol. Chem.* 16(5):917-927.
- NAS (National Academy of Sciences). 2014. Critical Aspects of EPA's IRIS Assessment of Inorganic Arsenic. Interim Report.
- NRC (National Research Council). 1989. Recommended Dietary Allowances. 10th Edition. National Research Council/National Academy Press, Washington, D.C.
- Nriagu, J.O. (ed). 1994. Arsenic in the Environment, Part II: Human Health and Ecosystem Effects. Wiley Interscience, New York, NY.
- Schropp, S.J. and H.L. Windom. 1988. A Guide to the Interpretation of Metal Concentrations in Estuarine Sediments. April 1988.
- Schropp, S.J. et al. 1990. Interpretation of metal concentrations in estuarine sediments of Florida using aluminum as a reference element. *Estuaries* 13(3):227-235.
- Surfside (Town of Surfside). 2014. Update. Sand Testing Results. May 14, 2014.
- Teaf, C.M., and D.J. Covert. 2012. Risk considerations related to arsenic exposure: Drinking water ingestion versus dietary intake or soil exposure. *Proceedings of the Annual International Conference on Soils, Sediments, Water and Energy*. Volume 17(1): 114-122.
- Teaf, C.M., D.J. Covert, P.A. Teaf, E. Page, and M.J. Starks. 2010. Arsenic Cleanup Criteria for Soils in the US and Abroad: Comparing Guidelines and Understanding Inconsistencies. *Soil & Sediment Contamination* Volume 15, Chapter 9, pp. 94-102..
- Terracon (Terracon Consultants, Inc.). 2014a. Beach sand chemical testing, Town of Surfside, Miami-Dade County, Florida. May 5, 2014.
- Terracon (Terracon Consultants, Inc.). 2014b. Beach sand chemical testing, Town of Surfside, Miami-Dade County, Florida. May 9, 2014.

- Terracon (Terracon Consultants, Inc.). 2014c. Beach sand comparability testing, Town of Surfside, Miami-Dade County, Florida. May 1, 2014.
- USEPA (U.S. Environmental Protection Agency). 2001. Florida's Inshore Marine Monitoring and Assessment Program (IMAP). Annual Report, Year Two. Environmental Research laboratory Office of Research and Development. U.S. EPA Gulf Breeze, Florida 32561. IMAP Annual Report 2000/2001. May 9, 2001. Available on the website located at http://www.floridamarine.org/features/categroy_sub.asp?id=3448.
- USEPA (U.S. Environmental Protection Agency). 2005. Toxicological Review of Ingested Inorganic Arsenic.
- USEPA (U.S. Environmental Protection Agency). 2007. Inorganic arsenic. TEACH Chemical Summary.
- USEPA (U.S. Environmental Protection Agency). 2014a. Integrated Risk Information System – Inorganic Arsenic. Available on the website located at <http://www.epa.gov/iris/subst/0278.htm>.
- USEPA (U.S. Environmental Protection Agency). 2014b. A Citizen's Guide to Radon. Available on the website located at <http://www.epa.gov/radon/pubs/citguide.html>.
- Uthus, E.O. 1994. Arsenic essentiality studies and factors affecting its importance. pp. 199-208. In: Chappell, et al. (eds). Arsenic: Exposure and Health. Science and Technology Letters, Essex, UK.
- Uthus, E.O. 1997. Arsenic: Essentiality and estimation of a possible requirement. Annual Meeting of the Society for Risk Analysis, Washington, DC. December 7-10, 1997.
- Valette-Silver, N.J., Riedel, G.F., Crecelius, E.A. 1999. Elevated arsenic concentrations in bivalves from the southeast coasts of the USA. Marine Environ. Res. 48:311-333.
- Windom, H.L., Schropp, S.J., Calder, F.D., et al. 1989. Natural trace metal concentrations in estuarine and coastal marine sediments of the southeastern United States. Environ. Sci. Technol. 23(3):314-320.
- WHO. 2001. Environmental Health Criteria 224: Arsenic and Arsenic Compounds. World Health Organization, Geneva, Switzerland.