



Coronet Junction Update

A Community Report

The Environmental
Protection Commission
of Hillsborough County



October 2003

A Message...

from the Executive Director
Rick Garrity, Ph.D.

In light of recent health concerns from residents of the Springhead and Lincoln Park communities, the EPC is working diligently with the Florida Department of Environmental Protection and the Hillsborough County Health Department/Florida Department of Health to assist with a public health assessment by the U.S. Agency for Toxic Substances and Disease Registry. The assessment is being conducted to determine whether abandoned landfills or Coronet Industries, an animal feed supplement producer, represents a special health risk to local residents.



Hydrogen Fluoride Analyzer

Also, based on feedback received from residents at a Community Open House in August, the EPC has participated in several additional environmental initiatives. Three specialized air monitors have been positioned around the communities adjacent to Coronet Industries to test local air quality. Initial test results indicate that dust and metals are similar in concentrations to other areas of the county. Dust concentrations and most metal numbers are well below EPA's health-based benchmarks. Levels of the metals cadmium, arsenic and chromium were elevated, but that is not unique to the Coronet Junction area. Those same metals are showing up at our west Tampa and Temple Terrace monitoring sites. In fact, these metals are a problem in most of the urban areas tested across the country, thus their presence is indicative of a national problem currently being addressed by regulatory efforts through the reduction of these concentrations to safe levels.

To determine the impact of air pollution from Coronet Industries on the surrounding soils, the EPC analyzed soil samples from over 20 neighborhood locations. The thought here was to capture any pollution accumulating from deposition of air emissions. Results showed that all metals analyzed were well below standards considered safe for residential activities. EPC has also commenced testing for airborne hydrogen fluoride gases with a specialized hydrogen fluoride analyzer from the EPA. The device must be pulled around in a special trailer and might look curious to the average citizen. So be on the lookout for us as we begin testing in neighborhoods within the next few weeks.

To address community concerns of potential environmental contamination from old landfills, the EPC has secured funding to contract a consultant for a hydrological site assessment on two old landfills off Park Road. Additional testing will be completed on soils in ditches in the adjacent Lincoln Park community. Site activity should begin soon.

Be assured the EPC Board and the staff are fully committed to fulfilling our responsibility to protect the environment and the health and welfare of the community. To facilitate the dissemination of information to the public, the EPC will continue to release test results to the media and through our Website. As the investigation progresses, the EPC will also work closely with the state to ensure that the health assessment is completed as soon as practical. Thank you for your patience and do not hesitate to contact us if we can be of service. I may be reached through my direct line at 272-5960 extension 1002.

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Soil in Neighborhoods Around Coronet Industries Analyzed

In an effort to determine the impact of air pollution from Coronet Industries on the surrounding soils, the EPC collected soil samples and analyzed them for toxic compounds. Heavy metals like arsenic, lead and cadmium are found naturally in phosphate rock. In the process of making animal feed supplements, these metal compounds are released into the atmosphere. In addition, hydrogen fluoride gas is emitted from the defluorinating processes at the facility. These pollutants are carried by the wind and may settle in the surrounding environment. Once there, pollutants may be washed off into surface waters, leach into ground water or inadvertently ingested during normal human activity. The severity of health impacts from atmospheric deposition of air pollutants depends on the concentrations found in the environment. One indicator of potential health problems is the pollutant levels in surface soils. Therefore, soil testing was completed to evaluate the long-term deposition of pollutants to the surface.

The locations for soil sampling were chosen according to the predominant wind directions and the expected areas of greatest impact in the local communities. Preliminary air dispersion modeling showed the highest concentrations of particle deposition would occur relatively close to the plant. The EPC took soil samples from 21 locations and analyzed them for 11 inorganic compounds and water soluble fluorides. The 11 compounds examined were: arsenic, antimony, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, selenium and boron. The results were compared to soil clean-up target levels codified in Chapter 62-777 of the Florida Administrative Codes.

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The results showed all measured concentrations were well below safe direct exposure levels for residential areas. The levels of arsenic, antimony and selenium were so low they were below the detection limits of the laboratory testing equipment. Consequently, results showed that local soils did not appear to be significantly impacted by dust fallout from Coronet, and that the soils were safe for residential areas for the 12 substances EPC tested. The reported concentrations are also well below the leachability standards and are not expected to result in groundwater or surface water contamination.

In order to better understand the level of impact from air pollution sources at Coronet Industries on the surrounding communities, a more comprehensive air deposition modeling study will be conducted with the assistance of the state. The air deposition model will factor in locally-specific meteorology and account for all sources of air pollution at the Coronet facility. The results will provide a more realistic estimate of pollutant deposition. If the deposition modeling study indicates more soil sampling is warranted, it will be done at that time.

Be advised this soil sampling exercise is only looking at the affect of air pollution settling on the surface. Over the next few months, EPC and other agencies may be conducting additional soil sampling for other reasons. For instance, the company will be testing soils in and around the plant looking for spills and contamination. In addition, the EPC has initiated a complete assessment of some old landfills in the Lincoln Park area which most certainly will involve additional soil sampling.

If you have any questions about the soils or the data we took, please contact Hal Koechlein or Alain Watson at (813) 272-5960.

Additional Air Monitors Installed in Coronet Junction

Because of citizen concerns regarding air quality in the Coronet Junction area the EPC installed three new specialized dust/metals monitors in the area. These monitors are located around Coronet Industries and sample every three days for 24-hour periods. The initial results of the filter analysis on the limited number of samples collected from August 22 - September 12, 2003 indicate that the dust and metals in the air around Coronet Junction are generally the same as or less than those collected at other similar monitors running in Hillsborough County and Pinellas County. Winds on the sampling days, recorded at EPC's Plant City High School monitoring site, were light and the three samplers generally registered similar readings, none of which could be attributed to any single source at this time.



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EPC Leads Landfill Investigation

In order to determine the impact of two old disposal sites located northwest of the Coronet Industries property, EPC was tasked to conduct a hydrogeological site assessment. The primary objective of this project is to investigate potential contamination issues that may be caused by the pair of old unpermitted waste disposal sites. The information obtained from the site investigation will be used by the Florida Department of Health in its efforts to determine current health risks to the residents in the Lincoln Park and Springhead communities.

In cooperation with the Citizen's Environmental Advisory Committee, Hillsborough County Board of County Commissioners, and the City of Plant City Commission, the EPC has secured adequate funding to hire an environmental consulting firm to implement this investigation. A technical group consisting of representatives of all the participating organizations was assembled to develop the scope of work for the landfill assessment. EPC's Legal Division has negotiated a site access agreement with the current property owner, Gregg Enterprises. The progress we have made thus far would not have been possible without the continued cooperation of Gregg Enterprises.

Based on available information, the disposal sites were leased by the landowner to Plant City and Hillsborough County from approximately 1959 to 1967 for waste disposal activities. The assessment of the area will include review of available information including historical aerial photographs, test pits to evaluate depth and composition of debris, soil borings for lithologic information, and soil and groundwater sampling and analyses. The results of the soil and groundwater testing will be evaluated using the State of Florida guidelines for soil and groundwater contamination. If either source is determined to be impacted by contaminants, additional assessment and remediation will be required of the appropriate responsible parties. The study will begin soon and is expected to be completed before the end of the year.

Additionally, the EPC has been requested by the State of Florida Department of Health to collect soil samples in the Lincoln Park subdivision area to investigate potential impacts from stormwater. This information also will be forwarded to state and county health agencies for inclusion in the federal health assessment.

Hillsborough County Health Department Leads Well Testing Efforts



The Hillsborough County Health Department is focusing on current health risks to residents in the Coronet area. The strategy is to investigate whether there are pollutants currently in the water, air and soil.

In cooperation with the Florida Department of Environmental Protection 93 wells have been sampled in the area of concern to determine whether they currently contain contaminants that may cause health problems. Of the 93 wells sampled, 73 of these wells have met safe drinking water standards. The 20 individual well owners with unacceptable results have been notified and are being supplied bottled water.

Preliminary results have led us to an area of interest that is bounded to the North by Cason Road, East by Wiggins Road, South by Medulla Road and Jim Johnson Road, and West by Tom Brewer Lane. Lists and maps of all citizen requests for sampling are being maintained. An additional 50 wells were sampled the week of October 6 within a quarter mile around elevated arsenic levels, results are expected the beginning of November.

The ongoing public health assessment is using this new data and existing environmental data provided by the Florida Department of Environmental Protection and the Environmental Protection Commission to guide the study. If at any time, the findings suggest a health risk exists the Health Department will take immediate action.

The Health Department has been actively documenting and addressing area residents health concerns, providing them with up-to-date information and ensuring that they are part of the public health assessment.

The Department remains committed to fully evaluating any potential risks and assuring the ongoing protection of the residents. Ultimately all the information will be provided to the Florida Department of Health and to the U.S. Agency for Toxic Substances and Disease Registry who will issue a final report.

FDEP Initiates Enforcement Against Coronet

Initial results from eight new on-site monitoring wells installed in August and September at Coronet Industries indicate that the facility is violating state groundwater quality standards at its property boundary. The new wells are in addition to its existing groundwater monitoring network of 11 wells, which have been part of the site's groundwater monitoring plan since 1984. As a result of these findings, the Florida Department of Environmental Protection has initiated enforcement against Coronet for violation of its Industrial Wastewater permit.

Initial results in one of the new test wells on the property, located between holding pond six and Cason Road, indicate elevated levels of radium 226, boron, gross alpha and sodium. Because test results from six private wells in the vicinity of the intersection of Gentry and Cason Roads revealed elevated levels of boron, there is reason to believe substances in Coronet's holding pond may be moving beyond the facility's boundary.

The FDEP wants Coronet to take swift and decisive action to ensure substances from its wastewater ponds are not affecting nearby groundwater. The agency is taking enforcement for groundwater violations at the property boundary. Coronet Industries has until November 7 to respond to the FDEP with measures they plan to take to come into compliance with its Industrial Wastewater permit. The EPC is responding to complaints and assisting the FDEP in their investigation.

(Air Monitoring continued from page 3)

These preliminary results are being forwarded to state and county health officials for inclusion in their health assessment of the Coronet Junction area. The preliminary review only looks at the airborne threat presented by these compounds and does not take into account other possible pathways of entry into the human body, such as ingestion or dermal contact. Qualified health officials need to review the data for any other possible health effects.



New air monitor located at Springhead fire station

Even though the air in the vicinity of Coronet Junction appears to be generally the same as other areas, EPC has again confirmed some concerns previously identified to the public. As EPC staff presented to the Board last year, the EPA's Cumulative Exposure Project (1998) and the National Air Toxics Assessment (2002) stated some air toxics were present in urban areas at elevated levels. There are some metals in the air in every urbanized area around the country, including Florida and the Tampa Bay area, which exceed EPA's health benchmarks. These metals include arsenic, cadmium, and chromium, which are emissions generated in part from combustion of fossil fuels, such as coal and fuel oils. EPA has previously identified these metals, along with a

number of other compounds, as compounds of concern. These 33 compounds are called Urban Air Toxics, and EPA, in conjunction with state and local agencies such as EPC, is concentrating efforts to reduce these compounds, by confirming their levels through modeling and monitoring, and by reducing these concentrations to safe levels through regulation.

Because of the collective regulatory efforts of EPA, FDEP and EPC, additional air pollution controls were recently installed on waste incinerators in the Tampa Bay area, and with the conversion of TECO's Gannon power plant from coal to natural gas, EPC expects to see a decrease in these emissions in the future.

If you have questions about EPC's air monitoring, please call Leroy Shelton at (813)-272-5960, extension 1251.

Lead Agency Contact Information:

Environmental Protection Commission

Air quality

Community soil sampling study

Old landfills study

(813) 272-5960

Florida Department of Environmental Protection

Surface and ground water issues

Soil contamination issues at Coronet Industries

(813) 744-6100, ext 481

HC Health Department

Private well testing

(813)307-8015, ext 5961

Florida Department of Health

Health study

(toll free) 1-877-798-2772

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We're on the Web!
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