



TOWN OF SURFSIDE

MUNICIPAL BUILDING
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MEMORANDUM

TO: Sand Project Community Monitoring Committee
FROM: Michael P. Crotty, Town Manager
SUBJECT: July 21 Meeting (7:00 pm)
DATE: July 18, 2014

The next meeting of the committee is scheduled for Monday July 21 at 7:00pm.

Pursuant to the committee's discussion and direction at its July 1, meeting, a significant portion of the meeting will be devoted to consideration of a testing protocol.

The enclosed draft (Sand Sampling and Chemical Analysis Plan) prepared by Dr. Christopher Teaf provides recommended number and location of samples; collection protocol of samples; analytic categories; selection of firm (s) to implement testing plan; and data presentation of analysis

As part of the committee's review of the protocol, it will be necessary to determine final number of sites/samples; selection criteria of firms, costs and cost allocation.

As the committee moves forward on the sand testing issue, the varying views on specifically what the testing results mean must be addressed. A path to resolving this issue must be identified prior to the testing so that the upcoming testing results do not produce the same community dilemma and concerns we currently face.

What do I mean by this? For example, the current situation regarding arsenic levels is a point of contention. Over the past several months, seventeen samples (both in Surfside and on other Miami-Dade beaches) were tested for arsenic. All readings were in the 2 – 11 mg/kg range.

What is the controversy with these readings? The Florida Department of Health (FDOH); DERM; 2 private toxicologists and the Miami-Dade Health Department have stated that these readings are reflective of naturally occurring background arsenic levels in the beach environment of Miami-Dade County and are consistent with expected testing results. Further, the FDOH has “determined there is an extremely low risk of health effects due to the arsenic found in the sand of the Surf Club in Miami-Dade County”. In a subsequent update, the FDOH concluded that “even at the most conservative (highest) lifetime exposure from the levels of arsenic found on this beach, the increased cancer risk posed from this exposure would be essentially zero when compared to the large, background cancer rate”.

However, a number of citizens still express concern that the arsenic readings exceed the state recommended level of 2.1 mg/kg for residential. Based on my individual conversations with citizens and input at meetings, any reading above 2.1 mg/kg is not acceptable to them.

The new round of testing will likely result in similar arsenic readings for the sand in Surfside and in Miami-Dade (2 -11 mg/kg) as resulted from the first testing due to the naturally occurring background levels of arsenic in Miami-Dade beach sand which exceeds the 2.1 mg/kg for residential.

If a clear path is not identified prior to the upcoming testing to bring this issue to closure, at the conclusion of the second round of testing, nothing will have changed regarding the arsenic issue. Also, it is possible that the test results for the other items being tested will be analyzed by using any number of varying ranges or criteria.

Recommendation:

The FDEP is the public agency authorized by Florida State Statutes to regulate beach issues including environmental compliance. The permit for the sand project was issued by FDEP and they are the responsible agency per state law for following up on environmental concerns as has recently been demonstrated on issues such as lead based paint concerns; debris, etc. (The attachment to this packet includes correspondence to FDEP from ARS / Alex Front on lead issues to be investigated; and correspondence from FDEP to Coastal Systems / Surf Club on debris issues).

Therefore, it is recommended that the test results from the upcoming sampling be forwarded to the FDEP (Beaches Field Services and Compliance Enforcement Section) for their review and determination if there are health / safety issues relating to the placed beach sand based on the test results as this is the agency responsible for such matters. Further, any solution to the beach issue other than “no action” will involve FDEP in the approval process. Failure to include a process to bring this issue to an acceptable conclusion as part of the testing protocol, would likely be an exercise in futility and a questionable expense of resources.

[Note: The attachments contain a list of laboratories certified under NELAP by the Florida Department of Health].

Also, Dr. Leatherman will be in attendance to update the committee on his efforts to date on beach and sand compatibility and sieve test analysis.

The following attachments include reports referenced in the memo and various information which might be useful to the committee:

Attachments:

- Minutes, July 1 meeting
- Dr. Teaf's Sand Sampling and Chemical Analysis Plan
- List of Laboratories
- ARS / Alex Front Lead Information to FDEP
- ARS Locator site photos (May 22 -23)
- FDEP Compliance Assistance Offer (re: debris Coastal Systems / Surf Club Project)
- FDEP Compliance Assistance Offer (Chateau – removal of sand out of beach system)
- Arsenic concentration chart and concentrations in various media