

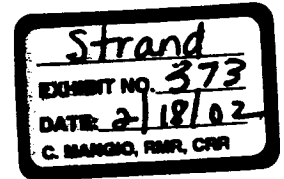
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USACE
REGULATORY BRANCH

July 5, 2001

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Northwest Regional Office
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ATTN: Ann Kenny



Subj: Additional Comment on the Port of Seattle's (Port) Airfield Project Soil Fill Acceptance Criteria

Ref. (1): Letter to Jonathan Freedman and Ann Kenny of February 16, 2001, from John Strand on the Subject of Determining Whether the U.S. Army Corps of Engineers (USACOE) Has a Scientifically Adequate Basis to Issue a Permit, Under the Clean Water Act (CWA) Section 404, for the Port's Project Proposed in the Second Revised Public Notice No. 1996-4-02325.

Ref. (2): Letter to Muffy Walker, Gail Terzi, and Ann Kenny of June 20, 2001, from John Strand on the Subject of a Rebuttal to the Port of Seattle's (Port) Response to 401/404 Comments, Reference 1996-4-02325.

Dear Ms. Walker, Ms. Terzi, and Ms. Kenny:

At the request of the Airport Communities Coalition (ACC), I have continued to follow and evaluate implementation of the Port's Airfield Project Soil Fill Acceptance Criteria as fill materials continue to be stockpiled at Seattle-Tacoma International Airport (STIA) in anticipation of building the third runway.

I have recently received some new information that I would like to share with you that increases my concern that the Port's Soil Fill Acceptance Criteria do not preclude the acceptance of chemically contaminated fill. Furthermore, I would like you to be aware

that the Port has not always been timely in sharing with the public the results of their soil-testing program, and that on at least one occasion, has delayed reporting the results of their testing. Of concern in this regard was learning that soils have been transferred to STIA that exceeded Model Toxics Control act (MTCA) Method A Soil Cleanup Levels, the standards against which all candidate soils are evaluated for use as fill at STIA.

As you may already know, I have previously identified serious environmental concerns with how the Port has approached the task of obtaining clean (uncontaminated) fill material for the proposed third runway at STIA (see References 1 and 2.). My present concern centers on the fact that the process to certify fill for use at STIA is still seriously flawed and nothing has been done, by either the Port or the Department of Ecology (Ecology), to improve the Port's Airfield Project Soil Fill Acceptance Criteria or how the process is implemented. The details for this opinion and the bases are presented in the discussion below.

I would like to call your attention to a Port Memo from Beth Clark to Paul Agid, dated 4/30/2001, on the topic of testing soils destined for STIA from the Black River Quarry. In this case, an initial testing of a single soil sample collected on 6/9/2000 revealed a concentration of total petroleum hydrocarbons (TPH) as diesel and oil of 310 and 200 mg/Kg, respectively, which exceeded the MTCA Method A Soil Cleanup Level for TPH of 200 mg/Kg. A retest of the same 6/9/2000 sample confirmed the initial results. A new standard of 2000 mg/Kg will go into effect on 8/15/2001.

Triplicate soil samples collected on 6/22/2000 and duplicate soil samples collected on 7/6/2000 indicated that while petroleum hydrocarbons were again present in the Black River Quarry soil up to 83.4 mg/Kg, these concentrations were below the MTCA Method A Soil Cleanup standard. On this basis, the Port began transferring the soil to STIA in 8/2000 (see letter to John Drabek, Ecology, from Paul Agid, Port, dated 5/15/2001).

Subsequent testing of soil from the Black River Quarry (duplicate samples collected on 9/29/2000 and again on 10/2/2000), as more of the soil was transferred to the STIA, again revealed TPH exceeding the existing standard. Concentrations as high as 222 and 270 mg/Kg were quantified on each of the two dates, respectively. The Port attributed the contamination to residual asphaltic materials in crushing equipment used to process soil/rock at the Black River Quarry. Apparently a pavement recycling operation also exists at the Black River Quarry site and shares the equipment that is used to process native soil/rock.

The point is that soils were accepted and transferred by the Port to the STIA that violated an agreed to process and set of standards. What is even more disturbing is learning that the testing of the Black River Quarry soil samples was undertaken on 6/9/2000 and again on 7/6/2000, nine or ten months before the Beth Clark Memo containing the results of this testing was sent to Paul Agid. It appears that the Port did not want these results released, perhaps because the Airfield Project Soil Fill Acceptance Criteria have already been criticized. Is it also possible that the Port did not want these data released until the new 2000 mg/Kg standard for TPH took effect on August 15, 2001? This way, the

contaminated sediments might not have had to be removed from the STIA. Also, if these data had been reported to Ecology in a timely manner, e.g., in the Second Quarterly report 2000, perhaps the Agency could have stopped the transfer of the TPH-contaminated sediments to STIA.

Ecology is also not exempt from criticism. According to the Beth Clark Memo dated 4/30/2001, Ecology called to the attention of the Port the finding of higher than anticipated copper concentrations (77-110 mg/Kg) in samples of Black River Quarry candidate fill collected beginning 6/9/2000. Please note there is no MTCA Method A Soil Cleanup level for copper. The point is that Ecology should have also at that time addressed the documented exceedances of TPH in the Black River Quarry soils, requiring the Port to undertake additional testing to determine the extent of TPH as well as copper contamination at STIA. As a consequence, we really don't know the extent of either TPH or copper contamination transferred to the STIA fill stockpile. It is not known when Ecology conducted this review but likely after receipt of the Third Quarterly Report 2000, in September or early October 2000. Clearly, Ecology should have required timelier reporting when certifying compliance of candidate soils destined for the STIA. The Port should have been required to submit the results of the 6/9/2000 in their Second Quarterly Report 2000.

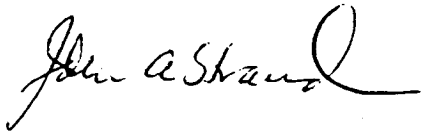
Neither the Port nor Ecology requires a statistically representative number of samples be collected when certifying candidate soils free of contamination. The number of samples collected is simply left to the discretion of the Port's consultant. In the case of the Black River Quarry testing, on average only duplicate samples were collected in anticipation of each transfer of soil to STIA, hardly representative of the volume of soil being transferred to STIA in each shipment. Actually, the number of samples collected over the period that soil was transferred to STIA, from August to October 2000, varied from one to four samples per anticipated shipment. We don't know the volume of each shipment but in all, 51,849 CY or 93,328 tons were transferred to STIA.

Based on this most recent information, then, there is evidence that fill from the Black River Quarry already stockpiled at STIA contains TPH that exceeds the 200 mg/Kg MTCA Method A Soil Cleanup standard. Because this soil has not been adequately characterized for residual contamination, it could contain TPH that exceeds the 2000 mg/Kg MTCA Method A Soil Cleanup standard that takes effect on August 2001.

Taken together with the knowledge that fill already stockpiled at STIA includes dredged sediments from the Duwamish River that contain both PCBs and DDT, and possibly TPH-contaminated soil from the First Avenue Bridge site in Seattle (see Reference 1), it is my opinion that the Port's Airfield Project Soil Fill Acceptance Criteria remain flawed and do not preclude the acceptance of chemically contaminated fill in the future. This increases the concern that chemical contaminants at the fill placement site have the potential, if not the probability, to percolate through the fill pile to groundwater, ultimately contaminating wetlands and surface water that may be connected to the groundwater stream. In light of this knowledge, it is also my opinion that approval of the Port's proposal under Sections 401 and 404 of the Clean Water Act would be ill advised.

Thank you for the opportunity to comment further on this issue. I am available by phone, email, or in person, to discuss any of my comments in greater detail. A *Curriculum Vitae* summarizing my academic education, specialized training, and work experience is attached to Reference 1.

Yours very truly,

A handwritten signature in cursive script that reads "John A. Strand". The signature is written in black ink and is positioned above the typed name.

John A. Strand, Ph.D.
Principal Biologist

attachment

cc: Peter Eglick
Kimberly Lockard