

Date: 1/6/98 7:50:17 AM
From: Al Castro ORL
Subject: Re: City of Vero Beach
To: Susan DeVore TAL
CC: Joseph Kahn TAL
CC: Chris Ferraro ORL
CC: Craig Diltz TAL
CC: Leonard Kozlov ORL

The reason I recommended that you contact Craig Diltz to access copies of previous reports to the Inspector General (IG) was because the report created by this office provided a summary of the compliance status of the Vero Beach Power Plant, especially as it pertains to the cooling unit that uses reclaimed water from the WWTF. Supporting attachments are also provided in the report.

I can only speak on the compliance status of the City's reuse program as it pertains to the quality of the reclaimed water provided to all the City's reuse sites, including this power plant's cooling unit no. 4. Compliance issues regarding emissions from all cooling units is beyond the scope of my program (Domestic Waste). However, F.Y.I. I have attached an investigative report provided by the District's Air Program (which was an attachment to the report provided to the IG) that summarizes their findings on the emissions from cooling unit #4.

Based on my past review of my program's file records, the City has consistently provided an acceptable quality of reclaimed water to the power plant and is in compliance with all regulatory reuse requirements as applicable to this site. I hope this helps you. You may still need to contact Craig and/or our District's Air Program (Len Kozlov, Program Administrator) if you need compliance information on issues related to their programs.

Al,

I appreciate your quick response and all of the information; we were not aware of the various reports. Joe Kahn is not in the office today, so I need to check with him to see if we need the information Craig Diltz can provide.

Denis Ohlrich did not file a complaint with us, but did inquire about the City of Vero Beach's compliance status. We just issued the Title V permit for Vero Beach and wanted to check that there haven't been any compliance problems. I would appreciate it if you would let me know if there have been any compliance problems associated with the City of Vero Beach, especially with the cooling towers.

Thank you,

Susan

Summary
of Investigation of the complaint from Mr. D. Ohlrich

I have evaluated the performance of the #4 water cooling tower at the Vero Beach Power Plant that, according to the complaint from Mr. D. Ohlrich, was a source of air pollution in that area.

The process in the Unit #4 cooling system is as follow: reclaim water from the waste water treatment facility (WWTF) is being used in the condenser as a heat exchanging liquid. To reduce its temperature, water is pumped to the cooling tower where it has the contact with the ambient air. As a result of this process, approximately 70-80% of this water is evaporated, and the remaining 20-30% of the flow is mixed with "fresh" reclaimed water from the WWTF and is returned to the condenser. Also, some of this circulating water goes back to the WWTF. The normal yearly consumption of reclaim water in the Unit #4 is about 60 million gallons. To maintain the required quality of reclaimed water for the cooling purposes, some chemicals are added in to the process -an aqueous blend of acrylate polymer and organophosphorous compound (~15 ppm), sodium tolytriazole (0.5 ppm), halogenated substituted hydantoin (0.1-0.2 ppm), and a polyglycol NALCO 2308 (trace concentration). The first two compounds are not volatile products, and they are more likely to stay in the water phase during the evaporating process in the cooling tower. Thus, only halogenated substituted hydantoin from additives can be considered as a volatile product.

To calculate VOC and HAPS emissions from #4 Water Cooling Tower I assumed that all VOCs and HAPS from reclaimed water to be evaporated in the tower are discharged into the ambient air.

| Parameter | Concentration, ug/L | Amount, lb |
|---|---------------------|------------|
| VOC in reclaim water (Effluent Analysis Report) 37.7 ug/L | 37.7 | 19 |
| HAPs in reclaim water (Effluent Analysis Report) | 6.9 | 3.5 |
| Halogenated Substituted Hydantoin (Considered as HAP) in evaporated reclaim water | 200 | 100 |

Thus, the maximum amount of VOCs from reclaim water being discharged to the ambient air is approximately **125 lb/year** (HAPs ~ **103.5 lb/year**). This amount is

relatively small compare to the quantities of VOCs from the power generating Units of the plant that are ~25 t/year (calculated on the basis of AP-42 factors) and it is much less than VOC air emissions from automobiles and area sources in that part of the city.

A..Sobolevskiy, Ph.D.
Compliance/Asbestos supervisor
Air Resources Management

27 October, 1997

Date: 1/6/98 9:11:31 AM
From: Susan DeVore TAL
Subject: City of Vero Beach
To: Craig Diltz TAL
CC: Joseph Kahn TAL

Al Castro has recommended contacting you to access copies of the reports to the Inspector General (IG) regarding the City of Vero Beach Municipal Utilities. He indicated that you have complete copies of the District's and Tallahassee's Water Facilities reports to the IG.

Since we just issued the Title V permit for this facility it is important for us to be aware of their compliance status. I would appreciate your help in getting these reports. I will be in the office this week and can drop by to pick them up. Thank you.

Susan
Ph: 921-9537

Date: 1/5/98 1:42:22 PM
From: Susan DeVore TAL
Subject: City of Vero Beach
To: Al Castro ORL
CC: Joseph Kahn TAL

Al,

I appreciate your quick response and all of the information; we were not aware of the various reports. Joe Kahn is not in the office today, so I need to check with him to see if we need the information Craig Diltz can provide.

Denis Ohlrich did not file a complaint with us, but did inquire about the City of Vero Beach's compliance status. We just issued the Title V permit for Vero Beach and wanted to check that there haven't been any compliance problems. I would appreciate it if you would let me know if there have been any compliance problems associated with the City of Vero Beach, especially with the cooling towers.

Thank you,

Susan

Date: 1/5/98 11:06:40 AM
From: Al Castro ORL
Subject: Re: City of Vero Beach
To: See Below

Susan,

Thanks for your patience. I just got back into the office today.

The subject facility and complainant are very familiar to Central District and Tally Water Facilities Staff. Issues raised by him have been the past subject of confidential FDLE and DEP Inspector General (IG) investigations. The Central District provided a comprehensive report (on the issues and allegations brought up by Ohlrich) to the Inspector General's office back in 11/97. I believe Mimi Drew's Water Facilities Staff in Tally (particularly the IW and DW sections) were to also provide a report to the IG.

Before you respond to the individual, I highly recommend you contact Craig Diltz to ensure your response is consistent with previous DEP correspondences and reports to the IG. Craig should have complete copies of our District's and Tally's Water Facilities reports to the IG. By copy herein, I'm letting Craig know you may be needing his assistance.

Craig: Could we get a copy of the Water Facilities' report to the IG? We would like to have one prior to the upcoming public meeting for the IW Draft Permit. Is the Public Meeting still on for 1/28/98 in Vero Beach? Please advise. Thanks.

Al

Al,

Do you know if there have been any compliance problems associated with the City of Vero Beach Municipal Utilities, especially with the cooling towers?

We are trying to answer a citizen's concerns and I am sure you have heard from him, Dennis Ohlrich.

Lee Miller informed me that there is a hearing coming up, but I was not sure if that is associated with Mr. Ohlrich.

I know that you are out this week, so I don't expect to hear from you until you return.

Thank you.

Susan

To: Susan DeVore TAL
CC: Joseph Kahn TAL
CC: FERRARO_C@A1@ORL1
CC: Craig Diltz TAL
CC: Elsa Potts TAL
CC: Leonard Kozlov ORL

Date: 12/30/97 2:09:26 PM
From: Susan DeVore TAL
Subject: City of Vero Beach
To: Al Castro ORL
CC: Joseph Kahn TAL

Al,

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Thank you.

Susan

C O V E R
S H E E T

FAX

To: Joseph Kahn, P.E. / FL Dept of Environmental Protection

FAX: 904-922-6979

Subject: NEW TELEPHONE NUMBERS

Date: August 15, 1997

Pages: 1, including this cover sheet.

Please note the following change of telephone numbers for the City of Vero Beach Municipal Power Plant effective August 18, 1997:

Main Number for Power Plant (561) 978-5050

Fax Number for Power Plant (561) 978-5090

RECEIVED
AUG 15 1997
BUREAU OF
AIR REGULATION

From the desk of...
Diana Gelesky
Administrative Secretary
P. O. Box 1369
Vero Beach, Florida 32961-1369

561-562-7231
Fax: 561-569-5981