

## DOCKETED

<b>Docket Number:</b>	97-AFC-01C
<b>Project Title:</b>	High Desert Power Plant (COMPLIANCE)
<b>TN #:</b>	201470
<b>Document Title:</b>	Water Supply Issues - Report of Conversation with CEC staff
<b>Description:</b>	N/A
<b>Filer:</b>	Craig Hoffman
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
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**CALIFORNIA ENERGY COMMISSION**  
**REPORT OF CONVERSATION Page 1 of 2**



*Siting and Environmental Protection Division*

**FILE: (97-AFC-1C)**

		<b>PROJECT TITLE: High Desert Power Producers</b>	
<input checked="" type="checkbox"/> <b>Telephone</b>	760-246-8638	<input type="checkbox"/> <b>Meeting Location:</b>	
<b>NAME:</b>	Abdel-Karim Abulaban	<b>DATE:</b>	12/19/2013
<b>WITH:</b>	HDPP representatives		
<b>TIME:</b>	1:00 p.m.		
<b>SUBJECT:</b>	Recycled water quality issues		

Phone conference attended by:

- Craig Hoffman, Compliance Project Manager, Energy Commission
- Fred Strauss, HDPP, President of Operations TENASKA
- Frank Carelli, HDPP Site Operations Manager
- Jon Boyer, HDPP Environmental Compliance Manager
- Randy Cullison, HDPP operations staff
- David Wingfield, HDPP operations staff

**COMMENTS:**

In the 2013 Biannual Feasibility Progress Report dated November 18, 2013, HDPP owner indicated that they had been having some issues with recycled water quality that prevented them from using it. The main issues were that the recycled water contained high levels of total dissolved solids (TDS) and high concentrations of silica which has been determined to play a significant role in the decline of performance of the microfilter (MF) system. As a result, the power plant has been relying on well water for their industrial needs.

Staff wanted to discuss the reasons why the water quality has deteriorated in the past few months and to get input from HDPP staff about the prognosis of the issues. Staff also wanted to find out if the issues had to do with the water quality only or that water quantity was an issue as well.

After the meeting was started and Energy Commission staff summarized the purpose of the meeting, Fred Straus said that the best person to address those concerns was Frank Carelli.

Frank said that the problem with the recycled water was that it contained high levels of TDS and silica. These substances had to be precipitated and removed before the recycled water can be processed by the zero-liquid- discharge (ZLD) system utilized by the power plant. An MF system is used to condition the recycled water before it can be fed to the ZLD system. However, the precipitate from the high levels of TDS and silica kept clogging the MF system. HDPP staff contacted the recycled water supplier, the Victor Valley Wastewater Reclamation Authority (VWVRA) to discuss the reasons for the high TDS and silica. The VWVRA did not have a definite answer. However, it was indicated that low flows might have contributed to the elevated TDS and silica.

When asked if high TDS and silica concentrations were the only reasons the recycled water could not have been used by the HDPP, and if the recycled water quantity was also an issue,



Mr. Carelli indicated the plant could have used the recycled water if it were not for the high TDS and silica concentrations, but he also indicated that the recycled water quantity has also been affected by the poor economy and lack of growth in the area that would generate higher wastewater flows.

About the prognosis of the issues, Mr. Carelli indicated that they have no idea about when the situation is going to be mitigated and thus have no definite time in sight when recycled water consumption will resume. Mr. Carelli also stated that HDPP staff is in constant contact with the VVWRA staff to find out the cause of the problems and what can be done about them.

Energy Commission staff suggested that a follow-up meeting be held in two months to get an update on the situation. HDPP staff agreed to the follow-up meeting.

Action item: Meet about two months later (about February 2014) to get an update on the recycled water situation. Staff will verify flow rates and water quality conditions with VVWRA, research the filtration issues indicated by the owner, evaluate why recycled water is not currently being used since it is available and what necessary changes will need to be implemented so that the recycled water can be utilized.

<b>CC:</b>	<b>Signed:</b>
	<b>Name:</b>