

The Energy Development Corporation (EDC) Disputes the Alleged Pollution by its Bac-Man Geothermal Plant, as Publicized in this Series

Part XIII of a Series on "Saving Our Sorsogon (SOS) Bay"

By Lolo Bobby M. Reyes of Sorsogon City and West Covina, California

As stated in the previous article of this series, this writer raised to the visiting Ms. Gina Lopez the issue of the alleged pollution caused to Sorsogon Bay by the Bac-Man Geothermal Plant (BMGP). The BMGP is now fully owned and operated by the EDC, which is a sister company of the ABS

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CBN

. Readers may like to revisit the previous article by clicking on this link:

[Lolo Bobby Reyes Writes a "Love Letter" to the ABS-CBN Foundation's Gina Lopez About the "Save Our Sorsogon \(SOS\) Bay" Advocacy \(Part XII\)](#)

We wish to apologize to Ms. Gina Lopez, the EDC and to our readers for the delay in publishing the reply of the EDC. Ms. Lopez e-mailed the reply on Aug. 10, 2011

, while this writer was on his way to Detroit

, Michigan

, to participate in the annual convention of the Asian-American Journalists Association (AAJA).

After acknowledging with thanks Ms. Lopez's e-mail containing the reply of the EDC, this writer asked for advice some of his associates who are engineers. Some of them suggested that I request the Filipino-American Society of Architects and Engineers (FASAE) to field a team that will investigate the BMGP vis-à-vis the claims of pollution caused to Kawayan (spelled also as Cawayan) River.

The publication of this instant article was also delayed because I received word that the EDC would send through a relative who was visiting Sorsogon

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additional materials. The EDC sent through my said relative only a coffee-table book, "The Voices of the Mountain (The People of Mount Apo Speak), which mentioned in passing the BMGP. The EDC published the book.

Since my kin who hand-carried from Sorsogon the material actually resides near San Jose, California, the forwarding to the supposed EDC materials was further delayed.

Here is the e-mail of Ms. Gina Lopez, quoted in its entirety, which relayed the reply of the EDC to the issues raised by some environmental groups in the Province of Sorsogon:

QUOTE.-----Original Message-----

From: Regina_Lopez

To: mediabcla <mediabcla@aol.com>

Sent: Wed, Aug 10, 2011 3:52 pm

Subject: Fwd: RUSH PLS. ALERT ON AN OPPOSITOR IN YOUR US FORUM TOMORROW AUG.9

Hello Bobby.... I am looking forward to seeing you in Manila. My sense is that you would make a really good governor.. of course the fact that you are so environmental is definitely a plus factor for me. Sally Lee is also a good friend... so I am not choosing sides – but if you make it – I look forward to working with you ... and I am sure I can get my family to help Sorsogon in

the environmental projects as well ...

Bobby I am sending you information that EDC executives have sent me .. and which maybe you didn't get? So here it is ... Please let me know

My general understanding is that the environmental problems happened way before EDC started operations – so they are not to blame.

Bobby my family is very environmental ... I am sure we can work together. And yes my heart is also with the farmers and fishermen ... and we can help them in other ways as well. I have strong connections with the Dept of Agriculture. Let's work together for the betterment of Sorsogon. I am with you all the way ... Take care! and keep the light shining!!

1. Mr. Reyes blames EDC Bacman Geothermal Project for pollution:

a) He claims Cawayan River in Sorsogon was silted due to the expansion of the EDC Bacman Geothermal Project

EDC Reply:

This issue on siltation in Cawayan River was investigated by the DENR-EMB Region V Office and the Bacon Manito Multi Sectoral Monitoring Team that was composed of representatives from LGU Sorsogon City and Province, Department of Health (DOH), Sorsogon City Water District, Kabataan Bgy. Ng Pilipina and the Provincial Agriculture and Fisheries Council. Based on the results of their official investigation, the siltation along Cawayan River was caused by natural landslides brought about by Typhoon Milenyo,

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Typhoon Reming and partly by illegal quarrying at some portions of Cawayan River

. Another landslide of June 9, 2011

, was observed due to the high rainfall due to a low pressure area. During the rains, mud destroyed the rice farms of some residents.

The investigation team saw that the area opened by EDC was fully stabilized and revegetated as part of the mitigating measures to avoid potential erosions and landslides. These stabilization measures proved to be effective as these were not damaged during the passage of typhoons. It was even commended by Multisectoral Monitoring Team.

b) He accused EDC of dumping effluents to the Sorsogon Bay that caused Red Tide

EDC Reply:

This issue linking EDC Bacman as the cause of 2007-2008 Red Tide in Sorsogon Bay

. The red tide incidents were recorded in 2007-2008 when the project was not operating. The issue had long been discussed and closed by the Bacman Geothermal Monitoring Task Force led by Governor Lee and UP Marine

Science Center

. The Bacman plant of NPC has not been operating since 1980 so could not have dumped any thing to the bay todate. As a matter of fact, EDC which brought the NPC plant last October 2010 is still rehabilitating the power plant up to the end of the year.

. The study indicated that the red tide was due to the inversion of waters and the mixing of nutrients in the sea. Nutrients came from the breakdown of organics and other substances (phosphates from fertilizers and soap, food etc.) The decomposition of substances dumped by residents became

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nutrients to a certain algal microorganism that has red coloration. The increase in algal population they call algal bloom due to rich nutrients resulted in the red color in the bay thus, the red tide situation. The provincial government embarked on sanitation and toilet program to avoid organic pollution in the bay.

Here is our reply to Mr. Reyes last quarter which he said he did not receive.

Text Box: Energy Center, Merrit Road, Fort Bonifacio 1201 Taguig City, Philippines

Tel: + 63 (2) 893.6001 to 47; 893.1320 to 64 Fax: + 62 (2) 8410.1575

[IMAGE]

EDC HAS SENT THIS REPLY TO BOBBY REYES LAST JUNE 15, 2011

PLS

SEE

COPY

BELOW. AGAIN HE SAID HE DID NOT RECEIVE THIS.

June 15, 2011

Mr. Bobby M. Reyes

mabuhayradio.com

Sorsogon City and West Covina California

Dear Sir:

We would like to formally submit our reply to address the issues raised by your cousin, Ms. Sonia Lariosa, and Ms. Pilar Gabito on the siltation in Cawayan River and Red Tide in Sorsogon Bay, as quoted recently in your website, www.mabuhay.radio.com. As we have known, Ms. Lariosa was a former member of the Provincial Environmental Monitoring Task Force (PEMTF), now named Bacon-Manito Geothermal Multi-Sectoral Monitoring Team (BMGMMT) while Ms. Gabito is a member of the UMASA/Bayan Muna Party-Sorsogon. The following are our replies to their allegations.

(**Editor's Note:** Bobby Reyes is not the cousin of Ms. Sonia Lariosa. She is the cousin of the MabuhayRadio.com columnist Joseph G. Lariosa, who is based in Chicago, Illinois.)

1. On the issue of siltation in Cawayan River due to Tanawon Expansion Project of EDC-BacMan:

EDC Reply:

This recurring issue on siltation in Cawayan River, which was alleged by ** due to our proposed Tanawon Expansion Project, was investigated in ** by the DENR-EMB Region V Office and the Bacon Manito Multi Sectoral Monitoring Team (BMGMMT), that was composed of representatives from LGU Sorsogon City and Province, Department of Health (DOH), Sorsogon City Water District, KBP and Provincial Agri and Fisheries Council. [Based on the results of their official investigation, the siltation along Cawayan River was caused by natural landslides brought about by Typhoon Milenyo, Typhoon Reming and partly by illegal quarrying at some portions of Cawayan River

. Pls see Annex-1 on the final verdict of DENR EMB V on this issue.

The recent allegation of Ms. Sonia Lariosa on the siltation that occurred last June 9, 2011 was attributed to high rainfall due to the presence of a Low Pressure Area (LPA) in the Visayas and Bicol Regions at that time. The unusual high rainfall brought about by the said typhoons had substantially caused an increase of the levels of Total Suspended Solids (TSS) along Cawayan River and its tributaries, as shown in the attached rainfall and TSS

monitoring results from June 8, 2011 to June 9, 2011 (Annex 2), the periods where the Low Pressure Area had been observed. Note the elevated TSS

levels at our water quality station (BMGP Station 35) at Cawayan River

located about 1.2 kilometers upstream of the rice field owned by Ms. Lariosa during the passage of these weather disturbances.. This validated the real caused of siltation as alledged by Ms. Lariosa in her Facebook pictures (Annex-3) . EDC Bacman has no drilling operations in Tanawon as of now which could have caused the siltation . Further, we would like to note that EDC has installed the Zero Discharge System (ZDS), in which geothermal fluids from our drilling operations are injected back to our reinjection wells, thus avoiding release of contaminants at nearby rivers and at groundwater. This has been EDC's practice way before the passage of Republic Act 9275 (Clean Water Act).

In addition, we have fully stabilized and revegetated our newly opened drilling pads as part of the mitigating measures to avoid potential erosions and landslides. These stabilization measures proved to be effective as these were not damaged during the passage of typhoons **. Pls see Annex-4 on the mitigating measures of EDC to address erosion which was commended by BMGMMT as shown in their Compliance Monitoring and Verification Reports (CMVR) that was submitted to DENR.

2. On the issue that the Red Tide in Sorsogon Bay was caused by the dumping of effluents from EDC Bacman:

EDC Reply:

This issue linking EDC Bacman as the cause of Red Tide in Sorsogon Bay had long been discussed and closed by the Bacon-Manito Geothermal Monitoring Task Force (BMGMMT). Her Honorable Governor Lee and the BMGMMT members disseminated closure reports of this issue through a press release in ** to allay the fears of the public. Likewise, Cawayan Power Plant, which was located in Cawayan Sector, has not been operational since 2006, and therefore possible accidental discharge at Cawayan

River

and its tributaries is unlikely. Attached in Annex-5 is the official reply of

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DENR on this issue as raised by Ms. Pilar Gabito to Senator Pia Cayetano and Secretary Gibo Teodoro in 2009.

In regard to your query on the need to construct a sewage treatment plant for our wastewater, EDC has installed Zero Disposal System (ZDS), which includes sumps, thermal ponds and reinjection wells as containment prior to reinjection and recycling of geothermal fluids to the geothermal reservoir. The ZDS have valid DENR permits under RA 6969. Pls see Annex- 6 on the copy of Permit to Operate (PO) for Bacman 1& 2 TSD Facilities. We would like to emphasize that sewage treatment plant is not feasible for our operations as our waste brine is inorganic in nature and is fully reinjected to the geothermal reservoir. Also, the City of

Sorsogon

has recently commissioned the operation? of the Sewage Treatment Plant to treat the domestic wastewater of

Sorsogon

City

. This aims to reduce pollution loading from

Sorsogon

City

which possibly caused Red Tide at Sorsogon Bay

We hope that we have provided you the necessary information on the recurring concerns of Ms. Lariosa and Ms Gabito. Rest assured that EDC-Bacman will continue to fully support the interest and welfare of the Sorsoganons.

Thank you and more power.

Very truly yours,

LIBERATO S. VIRATA
Vice-President
EDC-BacMan

Siltation Issue

ANNEX- 2 Bacman Rainfall Data and TSS Monitoring Results in
BMGP 35

ANNEX- 3 Pictures of Cawayan River from Ms. Lariosa
Facebook Account

ANNEX – 4 Slope Stabilization Pictures of EDC Bacman

ANNEX- 5 Official Reply of DENR on RED TIDE ISSUE

ANNEX- 6 Permit to Operate (PO) of Bacman TSD Facilities (Sumps & Thermal Ponds)

(Note that there is no need for EDC to put up a sewage plant as we are not dealing with sewage. We do zero disposal by reinjecting the geothermal waters back to their origins in their deep reservoir 3km below the ground once the temperature is captured in the plant.)

- Photo.docx

UNQUOTE.

Editor's Notes :

1.) Please note that the said Annexes (1 to 6) and the supposed "Photo

docx" were not contained in the e-mail sent by Ms. Gina Lopez.

2.) Here are links to the previous articles in this series:

[The "Save Our Sorsogon \(SOS\) Bay" Initiative](#) (Part I)

URL: <http://www.mabuhayradio.com/ecology-and-the-environment/the-save-our-sorsogon-sos-bay-initiative>

[Sorsogon Bay: "So Near, Yet So FBAR." The "Red Tide" Ban by the BFAR Must Be Lifted](#) (Part II)

URL: <http://www.mabuhayradio.com/ecology-and-the-environment/sorsogon-bay-so-near-yet-so-fbar-the-red-tide-ban-by-the-bfar-must-be-lifted>

["Back to BacMan," Tracing to the Geothermal Plant an Apparent Cause of Pollution in Sorsogon Bay \(Part III\)](#)

URL: <http://www.mabuhayradio.com/ecology-and-the-environment/back-to-bacman-tracing-to-the-geothermal-plant-an-apparent-cause-of-pollution-in-sorsogon-bay>

[Ultimatum Given to BacMan Geothermal Plant to Treat Waste Water Before Emptying It into a Sorsogon-Bay Tributary \(Part IV\)](#)

URL: <http://www.mabuhayradio.com/ecology-and-the-environment/ultimatum-given-to-bacman-geothermal-plant-to-treat-waste-water-before-emptying-it-into-a-sorsogon-bay-tributary>

[Sorsoganons Got Guts and Know How to Face Death Honorably \(Part V\)](#)

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URL: <http://www.mabuhayradio.com/ecology-and-the-environment/sorsogon-ones-got-guts-and-know-how-to-face-death-honorably>

[More On the "Save Our Sorsogon \(SOS\) Bay" Advocacy: "Arin si Brockovich?" \(Part VI\)](#)

URL: <http://www.mabuhayradio.com/ecology-and-the-environment/more-on-the-save-our-sorsogon-sos-bay-advocacy-arin-si-brockovich>

[Sorsogon Public Officials Don't Know How to Google for Geothermal Energy's Environmental Issues \(Part VII\)](#)

URL: <http://www.mabuhayradio.com/ecology-and-the-environment/sorsogon-public-officials-don-t-know-how-to-google-for-geothermal-energy-s-environmental-issues>

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Sorsogon Must Go for the Jugular Against the EDC, the Lopez
Conglomerate and the PNOC, Et Al, for the Ecological Rape of Sorsogon
Bay (Part VIII)

URL: <http://www.mabuhayradio.com/ecology-and-the-environment/sorsogon-must-go-for-the-jugular-against-the-edc-the-lopez-conglomerate-and-the-pnoc-et-al-for-the-ecological-rape-of-sorsogon-bay>

[How Baby Boomers and their Children Can "Save" the World by Protecting
Ecosystems in their Original Hometowns \(Part IX\)](http://www.mabuhayradio.com/ecology-and-the-environment/how-baby-boomers-and-their-children-can-save-the-world-by-protecting-ecosystems-in-their-original-hometowns)

URL: <http://www.mabuhayradio.com/ecology-and-the-environment/how-baby-boomers-and-their-children-can-save-the-world-by-protecting-ecosystems-in-their-original-hometowns>

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[“Save Our Sorsogon \(SOS\) Bay” Campaign Endorsed to Department of Tourism as the EDC Contacts Bobby Reyes](#) (Part X)

URL: <http://www.mabuhayradio.com/ecology-and-the-environment/save-our-sorsogon-sos-bay-campaign-endorsed-to-department-of-tourism-as-the-edc-contacts-bobby-reyes>

[Bacon-Manito Geothermal Project EIA 1985](#) (Part XI)

URL: <http://www.mabuhayradio.com/ecology-and-the-environment/bacon-manito-geothermal-project-eia-1985>

[Lolo Bobby Reyes Writes a “Love Letter” to the ABS-CBN Foundation's Gina Lopez About the “Save Our Sorsogon \(SOS\) Bay” Advocacy](#) (Part XII)

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URL: <http://www.mabuhayradio.com/ecology-and-the-environment/lolo-bobby-reyes-writes-a-love-letter-to-the-abs-cbn-foundation-s-gina-lopez-about-t-he-save-our-sorsogon-sos-bay-advocacy>

(To be continued ...)

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