

Ledbetter, Kevin

From: Swanson, Cheryl
Sent: Monday, May 10, 2010 12:53 PM
To: Ledbetter, Kevin
Subject: RE: Scholz NPDES RFI #2 response
Attachments: Scholz RFI #2_FDEP response 5-10-10.docx

Kevin,
Attached are Biology's comments on the Plant Scholz RFI #2. Let me know if I can be of further assistance.
Thank you,
Cheryl

-----Original Message-----

From: Ledbetter, Kevin
Sent: Friday, April 30, 2010 2:50 PM
To: Swanson, Cheryl
Subject: FW: Scholz NPDES RFI #2 response

Good afternoon Cheryl,

Looks like GPC finished with their review of your 316(b)/thermal study comments for the Scholz facility renewal - their comments are attached above under "Attachment 1" in the pdf. I apologize for keeping you so busy with all of these :(. It's definitely going to be a crazy month.... Thanks again for all the help :)

Sincerely,

Kevin Ledbetter
Engineering Specialist III
Power Plant NPDES Permitting
(850)245-8042

-----Original Message-----

From: Kennedy, Susan Butler [<mailto:SKENNEDY@southernco.com>]
Sent: Wednesday, April 28, 2010 2:22 PM
To: Ledbetter, Kevin; Ross, Nancy; Clanton, Corinna
Cc: Heinfeld, Brian E.; Peacock, Kenton; Maxwell, Jora S.; Markey, Richard M.
Subject: Scholz NPDES RFI #2 response

Your copy is attached.

Susan B. Kennedy, Q.E.P.
Environmental Affairs
Gulf Power Company
One Energy Place
Pensacola, FL 32520-0328
850-444-6153/cell 850-336-6153

FDEP Biology response (May 10, 2010) to RFI (April 28, 2010) for
Gulf Power Company Scholz Electric Generating Plant

Attachment #1

316(b):

1) through 5) No responses needed.

316(a):

Hester Dendy

Because Plant Scholz was not operating in 2009 when the Hester Dendys were deployed and incubating, FDEP Biology's biological assessment will rely on the Thermal Plume Study from July 2008, provided with the RFI responses.

FDEP comments on the Thermal Plume Study from July 2008:

- In future reports, it would be helpful to include the raw taxa counts with the corresponding calculated #/m² values. Also, please provide the formula used for the diversity calculation along with the collapsed taxa lists used to calculate diversity.

The data from the 2008 Thermal Plume Study indicates reasonable assurance that the difference between the macroinvertebrate communities in the Apalachicola River upstream and downstream of the Plant Scholz discharge is within an acceptable level and meets the criterion of Florida Administrative Code 62-302.530(10).

Responses to RFI #2 which addressed the 2009 Hester Dendy study:

- 1) No response needed.
- 2) No response needed.
- 3) In areas with little natural habitat, deployment of artificial substrates provide a means to assess a colonizing community that would be supported by the condition of the waterbody. If present and available, natural substrates to a depth of 0.5 m would be sampled. Although consistent depth below surface at all locations should remove bias in site comparisons, artificial substrates at depths greater than the 1 m specified in the SOP are deeper than what would be sampled if natural habitat was present and available and have a higher probability of organism loss upon retrieval. No further response needed.
- 4) No response needed.
- 5) No response needed.
- 6) Due to Plant Scholz not operating in 2009, FDEP Biology's biological assessment will have to rely on Thermal Plume Study July 2008 data. The response, however, mentions that the Hester Dendys were moved to deeper water after deployment, during the study. In addition to velocity and turbidity, movement of Hester Dendys during incubation may dislodge organisms. The movement of the Hester Dendys should have been stated in the report. No further response needed.
- 7) No response needed.

Stream Condition Index

- 1) There seems to be some confusion. The Stream Condition Index (SCI) does not evaluate habitat. For that purpose, a Habitat Assessment is conducted by a person in habitat assessment “pass status.” The SCI evaluates the community of macroinvertebrates present at a site, a site defined as a 100m segment of stream or river.
FDEP does not come to the same conclusion that “it is clear that the area does not provide appropriate habitat to properly evaluate the ecosystem health using SCI.” The SCI sampling targets specific, productive habitats. If the habitat is not appropriate for the SCI or if there is not at least 2m² of productive habitat, the sampler is supposed to abort sampling. The SCI was conducted and the macroinvertebrate community was evaluated (score calculated). It may be true, however, that the SCI is not the best tool to use for this system.
The SCI scores obtained from this sampling indicate that the macroinvertebrate community is below an expected healthy, well-balanced community as measured by the SCI tool. It is then up to the sampler or evaluator to decide the cause. In this particular case, physical attributes such as low flow or channelization of the intake and discharge canals may account for the lower scores in these two samples compared to those in the river. Low quality or little productive habitat can be cause for low SCI scores in the river.
This may seem like a lot of semantics, but it is important for quality assurance purposes that FDEP tools are understood, used appropriately, and interpreted correctly. Thank you for your patience and understanding. No further response needed.
- 2) The response is correct as long as the SCI certified person is with and observing the trainee. For clarification purposes, it is not intended for the team to split up and have the SCI certified person do half the sweeps and the trainee to be by himself or herself doing the other half of the sweeps. No further response needed.
- 3) Currently, the SCI and Habitat Assessment certifications are separate. This requirement will likely change in the future with QA Rule revisions made by DEP’s Standards and Assessment Section. The SCI audit ensures that the sampler can identify appropriate habitats to sample for the SCI or make a sound professional judgment to abort sampling. The Habitat Assessment testing ensures that all samplers in Florida score physical attributes of a stream similarly. Similar scoring increases confidence in the comparability of results. For quality assurance purposes, any Habitat Assessment scores generated by staff that are not in “pass status” should be flagged in any report as approximate values which are to be used for information purposes only, rather than as data. No further response needed.
- 4) No response needed.
- 5) The macroinvertebrate community responds to condition over time, therefore the SCI can still indicate the health of a waterbody if intervals between disturbances (facility operation) are short. Although the facility was not operating at the time the 2009 samples were taken, the design of the study (sampling locations) suggests the intent to assess any effect of the discharge. Although the SCI scores from this sampling may have fallen below the healthy, well balanced community threshold, SCI scores taken over time can still be useful indicators of waterbody condition. The Department does not determine waterbody health based on a single SCI score. A second, temporally independent SCI sampling is needed to make a determination on the biological condition of the waterbody.
- 8) No response needed.
- 9) No response needed.
- 10) No response needed.