Dey, Asit (SD)

From: Jayne Sheppard <jayne.sheppard@ckpi.com>
Sent: June-04-18 11:22 AM
To: Dey, Asit (SD)
Cc: Tamsin Patience; Vanessa Rosenkranz
Subject: Requested Information for CKP's Landspreading Pilot Project
Attachments: Table 1 revision #2 06 04 2018.docx

Hi Asit

As per our telephone conversation this morning, I am providing the following additional information about CKP's landspreading pilot project:

1. I have revised the number of hectares available for Site 2A in Table 1 down to 3.2 (attached).

2. The "confidential' designation assigned by me to all correspondence for the CKP landspreading pilot project can be removed. It is not applicable to this project.

3. Summary of methods used to remove sludge from the CKP effluent treatment system:

    a. Settling basins:
        - The top layer (floating fibre mat) will be removed by a long-reach backhoe. This material is already relatively dry, so it does not require further dewatering.
        - The rest of the sludge in the settling basin will be removed by a floating dredge. A centrifuge will then be used to dewater the sludge. The supernate from the centrifuge will be returned to the settling basin. Since this is primary sludge, we do not anticipate the need to add polymer to assist with dewatering.

    b. Aerated lagoon:
        - For cell 1, we are going to try using a jet pump suspended from a crane to remove the sludge. The sludge will be pumped to a centrifuge for dewatering. Polymer will be added to the centrifuge in order to assist with the dewatering process. The supernate from the centrifuge will be returned to the aerated lagoon.
        - The quiescent zone of cell 2 will not be dredged this year, but has been done in the past. This is the area between the last aerator and the lagoon outfall, so there are no aerator cables in the way. A floating dredge is used to remove the sludge and a centrifuge is used to dewater the sludge. It is necessary to also use polymer to assist with the dewatering process. The supernate from the centrifuge is returned to the aerated lagoon.

    c. Monitoring:
        - Slump tests are conducted once per day to ensure that the sludge meets dewatering requirements (i.e. it does not slump more than 50%).
        - Samples are also collected twice per day for consistency testing.

4. The proposed date for a site visit by Manitoba Sustainable Development to review CKP's landspreading project is Wednesday, June 27, 2018. As discussed, I will be away on vacation for the first three weeks of July.

Please let me know if you have any further questions.

Regards,
Jayne

Jayne Sheppard, P. Eng
Environmental Superintendent
Canadian Kraft Paper Industries Limited
Box 1590 | The Pas, MB | R9A 1L4 | Hwy #10 North
T (204) 623-8587 | M (204) 617-0348
jayne.sheppard@ckpi.com