John Dawson

From: Elrod, Jon <jelrod@darlingii.com>
Sent: Thursday, February 1, 2024 5:19 AM
To: John Dawson
Cc: Ralph Munoz; Holmes, William; Carla Jo; Greg Wolffe (GWolffe@YorkeEngr.com)
Subject: RE: SEPA checklist for cooker replacement

Hey John,

The 260J (or 260U) cooker has a heating surface area of 2,600 ft^2, hence the 260J/260U moniker. Using 7.5 pounds of water per square foot of cooker area at a specific steam pressure, this equates to 19,500 lbs of water evaporated per hour; this is the max water evaporative capacity of this cooker. The moisture content of the incoming raw material then determines the max processing rate in units of raw material per hour. For instance, if the raw material has a moisture content of 50%, the max raw material processing rate would be 19,500 lbs water evaporated/hr / 50% = 39,000 lbs raw material/hr (or 468 tons raw material/hr). The higher the moisture content of the raw material, the less raw material able to be processed within the cooker in any given hour… and vice versa. So, I concur with you below, that the discrepancies in the historical documentation that Puget Sound By-Products would have provided are likely due to different moisture contents of the raw material. The raw material processing rate at a 75% moisture rate would be closer to 26,000 lbs/hr (or 312 tons/day), while a 39% moisture rate of would be closer to 50,000 lbs/hr (or 600 tons/day). For purposes of this application, Darling used the max processing rate 500 tons of raw material/day as a means to calculate potential emissions, deriving this number from historical moisture contents of the raw material processed at this facility. And again, the capacity of the cooker is not changing when compared to the pre-fire cooking equipment.

Hope this provides some more clarity. If you should have any additional questions, just let me know.

Thanks so much,

Jon Elrod

VP of Environmental Affairs, North America

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From: John Dawson <JohnD@pscleanair.gov>
Sent: Wednesday, January 31, 2024 7:54 PM
To: Elrod, Jon <jelrod@darlingii.com>
Cc: Ralph Munoz <RalphM@pscleanair.gov>; Holmes, William <BHolmes@darlingii.com>; Carla Jo

<cjo@yorkeengr.com>; Greg Wolffe (GWolffe@YorkeEngr.com) <gwolffe@yorkeengr.com>
Subject: RE: SEPA checklist for cooker replacement

Dear Jon,

In our records, we have the 260J cooker as having a capacity of 26,000 lb/hr, equal to 312 tons per day, which is different from the 500 tons per day you note below. While I cannot be certain of this, I suspect the 26,000 lb/hr (312 tons per day) might be on an output/production basis, while the 500 tons per day is definitely on an input basis, and that the discrepancy between the two would mainly be due to moisture that is driven off in the cooker. Some application materials related to the old cooker mention a capacity in the vicinity of 50,000 lb/hr, and some are in the 26,000 lb/hr range; however, none of these explicitly mentioned if they were on an input basis or an output basis.

Does this seem correct to you? To me, this difference between input and output bases of the ratings seems like the most likely explanation, and that 312 tons per day on an output basis is roughly equivalent to 500 tons per day on an input basis.

Please let me know if you agree with this logic.

Thanks,
John Dawson

PUGET SOUND

John Dawson
Engineering Manager

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From: Elrod, Jon <jelrod@darlingii.com>
Sent: Friday, January 26, 2024 5:41 AM
To: John Dawson <JohnD@pscleanair.gov>
Cc: Ralph Munoz <RalphM@pscleanair.gov>; Holmes, William <BHolmes@darlingii.com>; Greg Wolffe (GWolffe@YorkeEngr.com) <gwolffe@yorkeengr.com>; Carla Jo <cjo@yorkeengr.com>
Subject: RE: SEPA checklist for cooker replacement

Hey John,

After review, Darling is providing the below responses in blue. If there should be any questions, please feel free to let me know.

1. Under NOC 3741, the permitted capacity of the old cooker was 24,500 lb/hr, which equates to 294 tons per day. In this pending permit application, emissions estimates were based on a processing rate of 500 tons per day. Can you confirm that Darling is requesting a capacity of 500 tons per day? If so, it appears that this would constitute a 70% increase in the permitted processing rate: is this correct?

Darling's Response: The NOC 3741, which was issued to Puget Sound By-Products Company in 1991, does list an 1800 Equacooker with a raw material processing rate of 24,500 lbs/hr. Darling's understanding is that in 1994, which was prior to Darling's ownership of the site, Puget Sound By-Products replaced the 1800 Equacooker with a different cooker (260J model) that had a max processing rate of no more than 500 tons raw material per day. At the time of the fire in September 2022, Darling was operating a 260J model cooker. The permit application provided indicated that Darling would be installing a 260U model cooker, which also has a max processing rate of no more than 500 tons raw material per day. Therefore, Darling is not requesting a capacity increase but is instead proposing to rebuild the facility with like in-kind processing equipment compared to equipment pre-fire.

2. If a substantial increase in the permitted processing rate is sought, the SEPA checklist appears to not reflect this. For example, the application claims that there would be no impact to runoff or surface waters – is this still the case if 70% more material is being processed? What steps are in place to assure that there would be no impact to water in the face of increased material passing through the facility. The section related to energy implies that there will be no increase in energy consumed – is this correct, given the possibility of increased capacity? Is an increase in greenhouse gas emissions from natural gas usage expected due to increased processing? The checklist states that there would be no long-term impact on traffic-related noise or vehicular/truck traffic related to the facility: is this compatible with a capacity increase?

   Darling's Response: As identified in Darling's above response, no increase in permitted processing rate is sought so no additional impact is expected concerning runoff/surface waters, energy usage, greenhouse gas emissions, traffic-related noise, or vehicular/truck traffic.

Thanks so much,

Jon Elrod

VP of Environmental Affairs, North America

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From: Elrod, Jon
Sent: Thursday, January 25, 2024 7:46 AM
To: John Dawson <JohnD@pscleanair.gov>; Greg Wolffe (GWolffe@YorkeEngr.com) <gwolffe@yorkeengr.com>
Cc: Ralph Munoz <RalphM@pscleanair.gov>; Holmes, William <BHolmes@darlingii.com>
Subject: RE: SEPA checklist for cooker replacement

Hey John,

Acknowledging receipt. We will review and get information back to you as soon as possible.

Thanks so much,

Jon Elrod

VP of Environmental Affairs, North America

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From: John Dawson <JohnD@pscleanair.gov>
Sent: Wednesday, January 24, 2024 7:55 PM
To: Greg Wolffe (GWolffe@YorkeEngr.com) <gwolffe@yorkeengr.com>; Elrod, Jon <jelrod@darlingii.com>
Cc: Ralph Munoz <RalphM@pscleanair.gov>
Subject: FW: SEPA checklist for cooker replacement

Dear Greg and Jon,

Ralph and I were discussing the SEPA checklist for this project today, and some questions arose. We're hoping you can help us figure these out.

1. Under NOC 3741, the permitted capacity of the old cooker was 24,500 lb/hr, which equates to 294 tons per day. In this pending permit application, emissions estimates were based on a processing rate of 500 tons per day. Can you confirm that Darling is requesting a capacity of 500 tons per day? If so, it appears that this would constitute a 70% increase in the permitted processing rate: is this correct?
2. If a substantial increase in the permitted processing rate is sought, the SEPA checklist appears to not reflect this. For example, the application claims that there would be no impact to runoff or surface waters – is this still the case if 70% more material is being processed? What steps are in place to assure that there would be no impact to water in the face of increased material passing through the facility. The section related to energy implies that there will be no increase in energy consumed – is this correct, given the possibility of increased capacity? Is an increase in greenhouse gas emissions from natural gas usage expected due to increased processing? The checklist states that there would be no long-term impact on traffic-related noise or vehicular/truck traffic related to the facility: is this compatible with a capacity increase?

It's possible that we are misinterpreting the requested capacity or the basis for the emissions calculations. However, if Darling is requesting a substantial capacity increase beyond the previously permitted amount, it is important that the SEPA checklist reflect this.

We look forward to hearing back from you on these items. Please follow up with Ralph if you have any questions.

Sincerely,
John Dawson

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