

Greenhouse Committee Meeting Minutes, November 8, 2016

The meeting started at 10:06 a.m.

Present: Alan Christensen, Amy Hilske, Edgar Cahoon, Keenan Amundsen, Lance Meinke, Matt Anderson, Scott Sattler, Anne Streich, Hector Santiago, Stephen Wegulo, Shannon Russell (guest). **Absent:** James Schnable

Approval of Minutes of September 23, 2016 Meeting

Meinke moved to approve the minutes of the September 23, 2016 meeting; Christensen seconded. The minutes were approved with no objections.

Environmental Health & Safety Update – Matt Anderson

- Validation study of greenhouse waste decontamination at UNL - The purpose of the study was to verify sterilization method parameters in detail, evaluate the effectiveness of parameters in sterilization (if the parameters are not appropriate, then optimize the procedure), provide findings as a guidance to the Institutional Biosafety and Greenhouse Committees for adaptation of the approved procedures for all greenhouses. Three (3) plant and soil disposal methods used at UNL; 1) autoclaving, 2) steam pasteurization and 3) composting were used. Materials used: G stereothermophilus biological indicators (log 5), soil commonly used in greenhouse, 20 gal. galvanized trash cans, collected plant waste without leaves/stems. Biological indicators placed at 0", 4", 8", 12" from the bottom of the trash can or pasteurizer wagon. Autoclave parameters: 121°C at 16psi for 60 minutes (initial) Steam Pasteurization: 80°C for 3hrs.

- Complete Study Result Summary:

Material	Inactivation Method	Validation Method
Mixed Plant and Soil	Autoclave	BI
Stems and Roots in Soil	Pasteurization	Planting to verify non-viability
Soil only	Autoclave	BI

- A new symbol for plant containment was developed portraying a leaf with a padlock on it. UNL will adopt this symbol and will post it on any room that has transgenic plants and/or plant pathogens.
- Survey of eyewash stations in the greenhouses – the main reason for the survey was because corrosive material was found in one of the greenhouses and there wasn't an eyewash station available. All of the main UNL greenhouses have eyewash stations. It was discussed that all of the eyewash stations need to be tested regularly

Review of CY 2017 Rates

Shannon Russell, Financial Specialist at the Nebraska Innovation Campus Business Center, attended the meeting to help in the review and discussion of the the proposed rates for CY17. Amy shared with the group that the same methodology used to create this year's rates was used in previous years. Amy reviewed each tier, the square footage/billable usage, personnel expenses, operating expenses, and depreciation. It was noted that depreciation cannot be subsidized directly by any entity, however it is acceptable to subsidize operating and/or personnel expenses. Currently, it is proposed that \$282,198 of the operating expenses be subsidized by ARD to maintain rates at the same level or with a slight increase.

Operating Expenses - Amy stated that the greenhouse management team, agreed to remove one of the greenhouse vehicles, to save roughly \$4,000 per year in the car lease since the use was minimal and not worth the expense (less than 10 miles per month use). Christensen initiated concerns on whether or not capital should be included as a part of the operating expenses and how it will affect the rates.

Rate discussion – it was proposed a 2.5% increase in rates for CY17. Cahoon asked what percentage of the total rate was depreciation, Amy answered that 40% of the rate was attributed to the depreciation. Hector discussed contributions from F&A and ARD to the greenhouses. The group also discussed space utilization of the greenhouses in each tier. Tier 3 is the largest of the tiers.

Shannon Russell was excused from the group at 11:05 a.m.

Approval of CY 2017 Rates

Anne Streich moved to approve the CY2017 rates as presented and discussed; Meinke seconded. It was then discussed that a formal vote should be taken. A formal vote ensued and the group voted unanimously to approve the CY2017 rates as discussed and shown in the meeting.

Project updates – Amy Hilske

Greenhouse improvement projects – funding from CITB Improvement Group

- Added three (3) new growth chambers this year in Beadle – predominately reserved for those people using the HTS system (the third unit has LED lights).
- AGH4 is open and ready. It has the ability to add and remove CO₂ which is unique.
- Concrete floors added in some greenhouses.
- New rolling benches have been added.
- Beadle greenhouse 1 – issues with contractor not meeting criteria with the university, so it is pushed back to next year.
- Beadle – test with LED lights. 1D – new lights; 3D – carbon copy.
- Repaired some HID lights at Beadle.
- AGH4 – added air louvers for circulation in a most of the growth chamber rooms to help with heat and air pressure issues.
- A Commercial dishwasher was added to AGH4 in the pot room, which has chemical cleaning agents. This will significantly reduce the time spent in the cleaning and sterilization of pots.
- AGH4 west side– added fertilizer injectors.
- Replaced several cooling pads, added new shelving.
- Five (5) to six (6) of the East Campus greenhouses will be getting new shade cloth next spring.
- New drinking fountains.
- One of the teaching hoop houses – getting new plastic (each hoop house is on rotation to get replaced every 3-5 years).

The proposal to add air conditioner cooling to the Beadle greenhouses would cost between 1-2 million dollars. The Committee was agreed that the group would table the discussion and movement on this as there are questions on if it would be beneficial or not. Will be discussed at a later date.

Amy presented to the Committee a policy regarding the cleaning and sterilization process for growth chambers. It noted that all growth chambers (walk-in and reach-in) will be emptied, cleaned, heated, and sterilized once a year by the greenhouse staff. Users will be given a two (2) month notice prior to this cleaning. Amy will finalize the policy and bring it to the next meeting so that the Committee can review, finalize, and approve the policy before being implemented.

Other Business: The Committee discussed an interest in touring the greenhouses to be aware of the needs and also of the improvements being made. It was agreed that in the coming meetings, the group would rotate locations so that the members can tour the greenhouses at the same time.

Meeting adjourned: 11:50 a.m.