APPROVED 8/19/2015 (TAC)

SUMMARIZED MEETING MINUTES

City of Scottsdale
Environmental Quality Advisory Board
Regular Meeting

5:30 p.m., Wednesday, June 17, 2015
Scottsdale Community Design Studio
7506 E Indian School Rd., Scottsdale, AZ 85251

PRESENT: Alisa McMahon, Chair
Larry Person, Vice-Chair
Floyd Marsh, Board Member
Stephan Hermann, Board Member
Candice Gimbel, Board Member
Bruce Travers, Board Member

ABSENT: Michel Hulst, Board Member

STAFF PRESENT: Tim Conner, Office of Environmental Initiatives
Sam Brown, Office of Environmental Initiatives
Anthony Floyd, Office of Environmental Initiatives

Call to Order:
Chair McMahon called the regular meeting of the Environmental Quality Advisory Board (EQAB) to order at 5:36 p.m.

Roll Call:
A formal roll call took place confirming the members present as stated above.

Public Comment:
No public comment, no citizens present.

1. **Approval of Summarized Meeting Minutes -- Regular Meeting: May 20, 2015. Possible action** — Chair McMahon

   <u>MOTION AND VOTE – ITEM # 1</u>
   Corrections were provided by Chair McMahon and Board Member Marsh. Board Member Marsh provided a motion to approve minutes with the provided corrections from the Board, Board Member Gimbel provided a second to the motion; MOTION APPROVED 6-0

2. **Administrative Report -Discussion** Tim Conner & Board Members

- **Updates and opportunities**
  Mr. Conner shared a project list of the planned bond program initiatives that the Council had approved for a November 2015 election.

  Board Member Marsh shared an article from the Stanford Woods Institute for the Environment the Bill Lane Center for the American West titled *7 Lessons in Groundwater Management from the Grand Canyon State.*

- **Board member Marsh's Meeting with Water Resources Executive Director:**
  Board Member Marsh provided the following report regarding his May 22nd breakfast meeting with Brian Biesemeyer:
  1) <u>Discussed the status and direction of the water softener rebate program:</u>
     Mr. Biesemeyer's plans included maintaining the program in status quo going into fiscal year 15-16 and reassessing and reporting to Council near mid-term or later in the fiscal year. In general he is disappointed in the overall public response. In particular, the portable tank exchange program has only had 3- installations approved since the program's inception. He noted that other alternatives have increased modestly month to month.

     Staff will be reassessing the residential component during the next fiscal year. The current plan is to also consider an approach to developing a commercial rebate program, and possibly introducing it in the fiscal year 2016-2017.

     Brian is still interested in research and a white paper report on a survey-level evaluation and recommendations on alternative salt-less technologies, and felt it would be useful background during the future reassessment on the rebate programs.

     Board member Marsh suggested that he divide up assignments on completing draft of the sections of the

white paper outline along with any additional research that might be needed with Board Member Hermann during the summer. Board Member Marsh expressed the desire to complete this white paper prior to the end of his EQAB term in September 2015.

2) Brief discussion of the Drought Management Plan:
Mr. Biesemeyer made the following comments: The Bureau of Reclamation (BOR) has determined that all factors/criteria have fully been considered, and there will not be a tier 1 shortage declared in calendar year 2016. Additionally, there is a likelihood of 33% probability of a declared tier 1 shortage in calendar year 2017, and the BOR has advised the Central Arizona Project (CAP) and its water users including cities; however, this doesn't mean there won't be cutbacks in other use sectors. Even if a water shortage is declared, that doesn't mean the water will run out, but there will be financial impacts. The CAP forecasts that perhaps there might be a 25% increase in rates beyond those "advisory rates" established for the next 4-years-out. These rates were approved this month and are scheduled to begin in 2017 if a shortage is declared at that time.

In regards to point of contact for additional comments and input for the Drought Management Plan (DMP), Mr. Biesemeyer prefers that EQAB bring them directly to his attention and not the City Council's. Additionally, he didn't express objections to the possibility of having an EQAB member acting as an advisory member on the internal staff DMP Team.

Board Member Marsh brought up the question of possibly declaring a stage 1 "minimum water shortage" alert as a symbolic measure to put the community on formal notice. Mr. Biesemeyer indicated that he supported that, and that he and the City Manager's office had been discussing the pros and cons of that possibility. They were exploring how this action might formalize and in a way institutionalize a response to the current conditions.

- **Final Green Building Lecture of Season – Floyd/McMahon**

Chair McMahon and Mr. Floyd provided a briefing of the last lecture of the season. It was well attended, as were several of this season's lectures due to press releases for several of the lectures. Chair McMahon encouraged Board Members to submit topic and speaker ideas for next season. She also sought board member assistance with the 2015-16 season. Board Member Gimbel offered her assistance.

- **DCDC Water Climate Briefing – Hulst**
  No discussion due to Board Member Hulst's absence.

3. **Review status of criteria and process for proposed private/public sector *Environmental Achievement Recognition Program* – Discussion and possible action** — Board Member Hermann & Board

   Discussion, no action taken:

   Chair McMahon provided a document with comments on the latest draft. Board Member Hermann expressed that he felt her comments helped to organize and clarify some of the intended statements.

   Board Member Hermann asked how the Board should proceed to Council with the program. Mr. Conner stated he would review this with his supervisor, Randy Grant. He offered the possibility of using some form of a two-step process. The first to explain the program to Council, and a second to recognize a program or process and present them with an award of recognition.

   Board Member Hermann expressed that he felt the criteria did not need to be too specific. He said that "it is something that you would know it when you see it."

   Board Member Person suggested that it might be appropriate to ask the candidates to document or quantify their achievements.

   Board Member Hermann suggested that he attempt to revise the document one additional time and bring it back for Board Approval.

4. **Updated overview of progress of the Mayor's office for the reduction of idling at local schools during student pickup. Also recommendations and findings regarding a desired expansion of school bus service to local schools. – Discussion and** — Board Member Gimbel, Chair McMahon & Tim Conner

possible action
Discussion, no action taken:

Mr. Conner provided an overview of a past meeting with the Scottsdale School District representatives, ADEQ's Julie Finke and Rachel Smetana with the Mayor's office. He also provided an updated package of documents that have been developed by ADEQ as Idle Reduction Tools.

Board Member Marsh noted that although the ADEQ documents appeared to cover the idling issue, the safety issue seemed to be unaddressed. Board Member Person also noted that ADEQ's information appeared to be prepared for colder climates.

Board Member Gimbel and Chair McMahon agreed to work with the District to help them with their messages.

Mr. Conner suggested that the Board might also consider preparing some communication to update the Council on the past and progress.

5. **Review and possible approval of a letter to the Building Advisory Board of Appeals regarding EQAB's support of 2015 building code amendments as related to Appendix U – Solar Ready Provisions for new residential buildings, High Efficiency Plumbing Fixtures, Residential Lighting Efficiency, and Bathroom Exhaust Fan Controls – Discussion and possible action** — Anthony Floyd & Board

Mr. Floyd provided an overview of his latest draft memorandum of support from EQAB to the Building Advisory Board of Appeals regarding energy and water efficiency proposed code amendments. He noted that high efficiency kitchen faucets were not covered by the WaterSense standards that were referenced in the memorandum. Chair McMahon noted that other programs and codes do include high efficiency kitchen faucets, for example, CalGreen.

MOTION AND VOTE ITEM #5:

Vice-Chair Person moved to approve the letter of recommendation to

the Building Advisory Board of Appeals subsequent to the Chair working with Mr. Floyd and arriving at revisions to meet the intent of the Board's discussion regarding the inclusion of low flow kitchen faucet standards, a second was provided by Board Member Gimbel; MOTION APPROVED 6:0

6. **Possible communication to Water Resources' Executive Director regarding additional comments for future revisions of the City's *Drought Management Plan* – Discussion and possible action** — Vice-Chair Person

Discussion, no action taken

Vice-Chair Person provided a brief overview of his draft communication to the Water Resources' Executive Director. Vice-Chair Person expressed his dismay with the DMP stating that he felt that the supply side of the charts keeps reducing during the different stages of drought measures, but he does not believe the plan addresses the demand side of the equation. He objects that the plan's stage 4 says that those conditions are very unlikely to happen. The Vice-Chair suggests that stage 2 and 3 be strengthened and that the demand side must be planned for reduction. He referred to the future needs of his and other children in the community. He wants to begin to revise the plan now rather than wait for the needs in the future.

Board Member Hermann asked if this is something that will make someone angry on the Council since the plan has already been adopted.

Board Member Gimbel asked if the two water experts on the board might respond to the content of the memo.

Board Member Marsh stated that he has previously expressed serious reservations about this item and does not see the necessity for it to move forward. He expressed his belief that the current version of the advisory statement for the most part seems to be based on an emotional argument and lacks factual substance. He specifically said he believes this applies to the second sub-paragraph of the draft advisory document, and went on to state that he believes the DMP does deal with the topic presented in the first sub-paragraph of the proposed document.

Board Member Marsh went on to explain that current and past generations have been bearing a burden and directly shouldered the impacts of planning for water supply management and proactive preparation for the possibility of a drought period. Board Member Marsh said these past and present generations have been paying it forward with their pocket books. He stated this has occurred through property taxes, rates, and fees to receive water services, to store, manage, and reclaim supplies to secure the availability of future supplies of water. He cited examples including the CAP ten cents per one hundred dollars assessed valuation ad valorem tax, plus the additional four cents ad valorem tax to purchase store and bank surplus supplies for future water security. These taxes will continue as these supplies are recovered for use.

Board Member Marsh continued by noting CAP "M" & "I" rates which are passed through and included in the City's water cost of today's water service as well as the cost of ensuring future water supplies. He also stated that the same applies to SRP supplies through City participation in multi-party agreements to fund designs, construction and operations of capacity entitlement space to store future supplies as LTS credits.

Board Member Marsh pointed out that the City itself has also made significant capital investments independently to purchase, store, and recover excess surplus and reclaimed supplies for this purpose. Additionally, the City has used past and current rates and other utility revenue sources for a more secure future.

Board Member Marsh stated that these actions need to be acknowledged in any communication, and doesn't believe the document presented today does this. He went on to state that these past and current measures have built the foundation for a secure water supply future, and it is incumbent on future generations to continue to pay them forward as well. Board Member Marsh stated that he does not buy into the argument that we are passing the buck onto future generations.

Board Member Marsh concluded that for these reasons collectively, he does not endorse the reasoning and will not be supporting the recommended actions put forward in the proposed advisory statement. He stated that the DMP is intended as a living, self-standing policy document, and includes adequate provisions and

safeguards for mid-course revision and corrections as future conditions may merit.

Board Member Marsh went on to state, if anything, as a constructive suggestion, and referring back to the December 14, 2014 Board meeting minutes, the Board could direct energy to real time efforts to effectively communicating the drought preparedness message to the public and citizens as was suggested during the last December briefing provided by Mr. Biesemeyer. Mr. Biesemeyer had suggested that EQAB might provide assistance with a public outreach program.

Vice-Chair Person explained that he never meant to imply that water is free, and agreed that the City and the citizens have invested in today's water supply, but that he believes that the wrong message is being sent to the public by providing some of the cheapest water in the Nation. He stated he believes that the citizens have functioned under the public perception that supply will not end, and the drought should come to an end soon. He noted that the current drought has lasted for over fifteen years, and that scientists do not foresee an ending soon.

Vice-Chair Person went on to state that the DMP also supports assumptions that the stage 4 conditions will not come to pass, but he does not believe that science supports that opinion.

Board Member Travers asked if the plan can be revised if things were to really head south of their projections. Board Member Marsh replied yes. Both Board Member Marsh and Vice-Chair Person noted that the plan had a five year period for future review and revision.

Vice-Chair Person suggested that his position is that it is more appropriate to review and revise the plan now during the next two years. He pointed to the projection that the BOR more than likely will be declaring a tier 1 condition in 2017 as had been noted previously in Board Member Marsh's report from Mr. Biesemeyer. The Vice-Chair's concerns were based upon the idea that the tier 1 declaration would not impact the current actions and usage habits of the City's residents. He felt that that should be changed to call for noticeable demand reduction action at that time.

Chair McMahon stated that generally she agrees with the Vice-

Chair's position that the plan should be modified sooner and the plan places too much emphasis on the supply side versus the need to reduce the demand side of the equation. She did concede that she does not agree with the language in the current draft of the advisory, but wants to continue to work on this message.

Board Member Hermann stated that it didn't appear that there would be a unanimous vote of for approval tonight. Vice-Chair Person agreed, and stated that he didn't feel that all votes from the Board needed to be unanimous approvals.

Board Member Gimbel asked if compromised language could be reached that would be agreeable to both sides of the discussion, or if one side felt that the message was too offensive.

Board Member Marsh stated that he didn't see it as offensive, but feels that what is proposed is an emotional statement. It does not mention that the demand side assumptions are being represented as assumptions, and doesn't really state a factual long range big picture. He believes that the DMP can be adjusted if things go wrong in the future and doesn't want to shortchange or undermine staff's work effort.

Vice-Chair Person stated that he doesn't want to undermine staff. He believes there is room for improvement regarding the demand management in the future and thinks the report should acknowledge that, and if that is a concern of the Board, he thinks the Board needs to challenge the report. The Vice-Chair went on to say that in his opinion, staff might benefit from a slightly different point of view.

Vice-Chair Person asked Board Member Travers if he was comfortable with the plan's scheduled five year review schedule. Board Member Travers replied, yes, or sooner if the situation warranted it.

Board Member Gimbel stated that she believe that there is still plenty of time for the board to find a way to come together with a message that the Board will be comfortable conveying. She asked if the Vice-Chair felt that something needed to happen sooner than later.

Chair McMahon stated that she felt that the demand side of the plan does need to be reviewed and revised sooner than later.

The Vice-Chair replied, yes, something sooner than later should happen. He went on to state that he agreed that the City's past planning had been exceptional, but that it was based on past information. He felt that considering the information of today the current DMP needs to set a higher standard than it has.

Board Member Marsh challenged the appropriateness of sending a sense of urgency to change back to the City Council when the plan had only been adopted a few months ago. He also reminded the Board that the details of declaring a stage 1 or other stage controls were being currently discussed on a continual basis within the City Management.

Board Member Gimbel suggested that since the BOR is planning to declare a tier 1 in the next two years, wouldn't that raise the alarm to citizens, and isn't that the real intent we are attempting to achieve?

Board Member Travers posed the question of if we are going to adjust the demand side, is the City ready to also discuss a zero growth policy? Vice-Chair Person said he felt that point was moot since essentially the City is built-out. Many of the Board Members questioned this position.

Chair McMahon stated that she thinks the Board should continue working on this topic and it is feedback rather than an attack on the plan if the language in the advisory is revised appropriately. She encouraged the Board to either send their comments directly only to Vice-Chair Person, or rout them through Mr. Conner.

7. **Update of progress on the environmental topical contact list as developed by the board in 2014 – Discussion** — Vice-Chair Person
Discussion, no action taken

It was determined that this document should be included in the work submitted to the Council Sunset Committee and that the document should be updated at least annually.

8. **EQAB's response to September 2015 City Council Audit Committee Board and Commission Sunset Review schedule and process announcement – Discussion and possible action** — Chair McMahon & Tim Conner

Discussion, no action taken

Mr. Conner shared correspondence from the City Auditor stating that the basis of the sunset review report information should be limited to the three prior annual reports and any other one or two page documents that the Board felt should be included. The Board generally agreed to share any work that has taken place since January 2015 to provide a snapshot of the current year's body of work.

9. **Board discussion and possible action regarding the development of the 2015 EQAB work program topics list – Discussion and possible action** — Chair McMahon & Board Members
Discussion, no action taken

It was decided that this item should be discussed at a future meeting.

10. **Discussion on Boards desire to send formal comments to the General Plan Staff regarding the elements and chapter presented to the Board at the May 20, 2015 meeting – Discussion** — Chair McMahon & Board Members
Discussion, no action taken

The chair reminded the Board of the schedule provided by the Long Range Planning group requesting that any input be provided by August 2015.

11. **Board Members' reports, updates and suggestions for future agenda items- Discussion** — Chair McMahon & Board Members

12. **Updates and reminders –** — Chair McMahon & Board Members
    - No EQAB meeting in July
    - Next EQAB Regular Meeting Wednesday, August 19, 2015 at the Community Design Studio 5:30 p.m.
    - Next Green Building Lecture – Series resumes in October, 2015
    - Additional announcements by Board Members & Staff

Adjournment: With no further business to discuss, the Environmental Quality Advisory Board adjourned at 8:06 p.m. — Chair McMahon & Board

Members

ATTACHMENTS:

AGENDA ITEM # 3
AGENDA ITEM # 5
AGENDA ITEM # 6

Agenda Item # 3

Environmental Quality Advisory Board (EQAB) - 4/15/2015
DRAFT **"Environmental Achievement Recognition Program"**

Scottsdale Ordinance 2528 provides that:
"The Scottsdale Environmental Quality Advisory Board will advise the city council on issues relating to environmental quality and on the prioritization of future environmental activities and programs. The board shall also assist the council by providing nominations for any environmental achievement awards established by the council."

The **Environmental Achievement Recognition Program** is established to recognize achievement in the EQAB areas of interest: ~~*(City of Scottsdale agencies & departments are not eligible)*~~

sustainability	environmental responsibility	waste to saleable commodity
green building	environmental innovation	conservation of resources
solar ~~power systems~~thermal	waste reduction	waste to energy/cogeneration
water quality	renewable energy ~~(solar)~~	environmental education
salinity management	water conservation	environmental mentoring
drought prevention	energy conservation	environmental leadership/stewardship
vehicle idling reduction	air quality	

Scottsdale-based entities eligible to be recognized, including but not limited to:

retail sales	hotels	other levels of government agencies
food service (restaurants)	auto sales	nurseries
~~public~~ schools	~~private schools~~	any business~~es~~
barbers & beauty salons	manufacturing	associations/organizations
hospitals & clinics	aviation	~~green dry cleaners~~
medical & dental providers	construction	~~charter schools~~
apartment complexes	grocery stores	

(City of Scottsdale agencies & departments are not eligible)

RECOGNITION METHODS (may be combined):
1. Letter of Recognition
2. Presentation at Council meeting
3. Presentation at recipient event by Council member
4. Plaque or similar "hardware-trophy" item
5. Press release or news conference

PROCESS
1. Potential candidates will be directly identified by or referred to EQAB for consideration instead of through a nomination process
2. Candidates will be evaluated for eligibility and selected by a working group of two to three EQAB members appointed by the Chair. Selected candidates will then be brought to the full board for a vote.
3. how do we get from here to Council?

PRIMARY EVALUATION CRITERIA:
1. The number of years the established plan or program has demonstrated notable achievement that advances Scottsdale's environmental goals and quality of life
2. Promotes environmental sustainability internally with employees through training and routine activities including teams
~~3. Potential candidates will be directly identified by or referred to EQAB for consideration instead of through a nomination process~~
~~4. Candidates will be evaluated for eligibility, selected and evaluated by a small working group of EQAB members appointed by the Chair~~

. NEED ADDITIONAL CRITERIA
5. The candidate's program has not been recognized under Scottsdale Environmental Design Awards (SEDA), or substantively honored by ARIZONA FORWARD

YELLOW HIGHLIGHTS = UNSURE OF MEANING

NOTES:
A. Consult with staff on "environmental achievement awards established by the council." B. Research city of Phoenix, Maricopa County, and state of Arizona recognition programs.

Agenda Item # 5

Memorandum

TO: Building Advisory Board of Appeals

FROM: Environmental Quality

Advisory Board {EQAB) DATE: June

17, 2015

RE: **Recommendation for the Adoption of the 2015 International Green Construction Code (lgCC), International Energy Conservation Code (IECC), and International Residential Code (IRC) with related amendments**

The Environmental Quality Advisory Board has reviewed and recommends the adoption the 2015 edition of the International Green Construction Code (lgCC), International Energy Conservation Code {IECC), and International Residential Code {IRC) with associated amendments for energy and water savings.

Background

In 1998, Scottsdale adopted the first green building program in the state and the fifth in the nation. Since then, the city has issued over 1,300 green home building permits with an average annual home energy savings of $700 to $1000 for production and custom homes.

In 2003, Scottsdale became one of the first Arizona cities to adopt the IECC. Based on subsequent adoptions and amendments, the community has achieved 20 to 40% energy savings for residential and commercial buildings built between 2003 and 2014.

In 2005, Scottsdale city council adopted the nation's first LEED (Leadership in Energy and Environmental Design) Gold policy for newly constructed and renovated public facilities. To date, there are ten LEED certified city facilities, including four Platinum certified buildings that significantly reduce energy, water and natural resources while providing for a healthy indoor environment for employees and the general public.

In 2007, Scottsdale amended the IRC with water conservation and efficiency provisions to require demand-controlled hot water circulation systems for remotely located water heaters. A 20 to 30% water savings has been achieved per household by reducing the need to run water while waiting for hot water.

In 2012, Scottsdale City Council adopted the 2012 edition of the International Green Construction Code (lgCC). This adoption has made it easier for developers of commercial and multi-family housing to become green certified by utilizing an "integrated" approach through

building design, construction and the city permit process. Since 2012, Scottsdale has

certified five projects under the lgCC, with four other projects under construction including the Scottsdale Quarter multifamily and office development.

Recommendation

The 2015 lgCC and IECC have been updated for usability, new construction technologies, and alternative compliance options. EQAB recommends the adoption ofthe lgCC, IECC, IRC and the following related code amendments for energy efficiency, water conservation and indoor
environmental quality:

- High efficacy lighting for residential buildings (IRC/IECC)
  - Higher threshold (from 7S to 90% of light fixtures) with alternative lighting control options for saving energy
- Commissioning exceptions for lighting controls for commercial buildings (IECC)
  - Establish threshold exception for commissioning requirements based on lighting demand (kW)
- Bathroom exhaust fan controls for residential buildings (IRC)
  - Automatic shut-off control (delay timer or humidity sensor) saves energy while allowing sufficient time to remove moisture that contributes to decay and conditions for mold growth
- Solar ready residential appendix chapter (IRC/IECC)
  - Identify area on roof plan with required clearances for future solar PV or hot water systems to help facilitate conditions for future solar installations
- High-efficiency plumbing fixtures for residential and commercial (JRC/IPC)
  - Lower maximum flow rates for lavatory faucets, showerheads, kitchen faucets, water closets and urinals that are consistent with EPA WaterSense and ASHRAE
    189.1standards

In working with the Building Advisory Board of Appeals, EQAB is prepared to write a letter of support to City Council for adoption of these codes.

If you have any questions regarding this recommendation, please contact Anthony Floyd in Scottsdale's Office of Environmental

initiatives. Respectfully,

Alisa McMahon, Chairperson
Environmental Quality Advisory Board

Agenda Item #6

Advisory

TO: Brian Blesmeyer, Executive Director Water Resources FROM: Environmental Quality Advisory Board (EQAB) DATE: May 20, 2015
RE: Follow up Comments on the Water Resource's Drought Management Plan

Brian.

On December 14, 2014 EQAB received a presentation from you on the Draft Drought Management Plan. That plan has now been finalized and was approved by City Council. EQAB applauds the efforts of the Water Resources staff and the City Council to update the city's Drought Management Plan (Plan), and In broad strokes, we stand in agreement with the Plan.

For the past two months, the Bureau of Reclamation (BOR) has released its 24-month studies forecasting that Lake Mead will fall below elevation 1075' within two years. The August, 2015 24-month study will forecast the same or worsening conditions at Lake Mead. That August study will be the official trigger for drought declarations in the Lower Basin of the Colorado River and then shortages of CAP water to Arizona. Those events may, in turn, trigger the first stage(s) of Scottsdale's Drought Management Plan. Scottsdale has two years to prepare, and EQAB suggests tweaking the Drought Management Plan in two areas.

1) The Drought Management Plan does not address the contingency of dwindling reserves if the current 16 year drought on the Colorado River continues. Recent studies indicate that the drought may continue for a number of years Into the future. Regional planners are developing concepts for protecting the system Itself from dwindling reserves, and we agree that concept should be Incorporated Into Scottsdale's Drought Management Plan. Protect Scottsdale's reserves for future generations by protecting the system.
2) The Drought Management Plan's various stages do not go far enough with engaging citizens on the pending severity of drought's Impact on current and future Scottsdale residents. As currently constructed, the Plan shifts all of the impact of future shortages to the next generation. Current

residents should share the burden of water shortages to reduce the severity of Impacts to future generations. Tweak the stages of Scottsdale's plan to start conserving Immediately.

EQAB was Instrumental in adding Water Resources Element Goal WR2 to the General Plan draft. The policies under that Goal WR2 are the outline of EQAB's suggestions to Water Resources. In addition, EQAB offers to have one of Its knowledgeable members serve on the Drought Management Plan team.

Approved by a vote of 7-O at the EQAB monthly meeting on May 20, 2015. Elisa

_____ _____
McMahan, EQAB Chairman Date