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IN RE: :
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Public Forum Roundup Ready Sugar Beet :
Draft Environmental Impact Statement :
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Fargo, North Dakota
Tuesday, November 15, 2011

The following pages constitute the proceedings held in the above-captioned matter before the United States Department of Agriculture Animal and Plant Health Inspection Service Biotechnology Regulatory Services, held the Holiday Inn, 3803 13th Avenue South, Harvest Hall Boardroom, Fargo, North Dakota, before Joy Filipski of Capital Reporting Company.

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1 P R O C E E D I N G S

2 (Whereupon, the following proceedings
3 were had to-wit:

4 MR. GEORGE: I want to thank you all for
5 coming out here on a cold afternoon in Fargo, North
6 Dakota.

7 As part of the public participation process,
8 we're holding this public meeting to solicit your
9 comments of the Draft Environmental Impact Statement
10 for H7-1 sugar beets, also known as Glyphosate
11 tolerant, or Roundup Ready sugar beets.

12 My name's Dick George and I'm communications
13 branch chief of Biotechnology Regulatory Services, part
14 of APHIS, the Animal and Plant Health Inspection
15 Service, which, in turn, is part of USDA.

16 So listening to public comments is a very
17 important part of our process. We value your input.
18 We are very glad and grateful that you've taken the
19 trouble to come here today and to be a part of our
20 process.

21 Also with me are Rebecca Stankiewicz Gabel,
22 senior environmental protection specialist. She's
23 working the mike in, in the middle of the room.

24 And also Neil Hoffman, the science advisor to
25 the office of the deputy administrator. Neil has been

1 taking, signing names at the back of the room.

2 Neil and Rebecca are project managers of this
3 Environmental Impact Statement for H7-1 sugar beets.

4 Our purpose today is to take your comments
5 and to make them part of the public record.

6 You can also enter comments into the public
7 record by going to regulations dot gov, on the web and
8 entering H7-1 sugar beets in the search box.

9 The public comment period ends on December
10 the 13th.

11 All public comments will be considered before
12 a determination is made on the regulatory status of H7-
13 1 sugar beets.

14 On the table in the back of the room, we've
15 placed some handouts, including an Executive Summary of
16 the Draft EIS, fact sheets and other background
17 information. Please feel free to take this
18 information.

19 We are providing speakers three to five
20 minutes to present their comments. We will cut you off
21 at five minutes. You don't have to talk for three
22 minutes if you don't want to, 30 seconds is just fine,
23 but if you, if you have -- if you can say what you want
24 to say in less time, there's nothing wrong with that.

25 If you forgot to note at the sign-in that you

1 would like to speak, so, please do so now at the sign-
2 in table so we make sure that we don't miss you.

3 Rebecca will be our timer and we'll let you
4 know when your time is up.

5 We appreciate everyone being polite and
6 offering comments in a civil way.

7 In order to give everyone an equal
8 opportunity to speak, it's necessary to enforce the
9 five limit, five-minute time limit, unfortunately. So
10 even if you're not finished, we'll have to move on to
11 the next speaker. We appreciate your understanding.

12 When your name is called, please come to the
13 microphone in the center of the room. Please begin by
14 stating and spelling your name for our court reporter,
15 Joy Filipski, here, here in the corner.

16 A very important part of her job is getting
17 people's names right and getting their affiliations
18 correct. So, please, when you begin to speak, state
19 your name, spell your name and then tell us any
20 affiliation that you have with an organization if, if
21 you have one.

22 Your time will start after you've introduced
23 yourselves.

24 If you haven't already done so, please
25 provide Rebecca the written version of your statement

1 at the end of your, at the end of your five-minute time
2 period.

3 If you, by chance, have a couple of copies
4 of, of what it is you intend to say, it would be
5 helpful if you provided one to our court reporter to
6 have before you speak. If not, that's fine as well.

7 You can also put written comments in the
8 comment box, which is on the table in the left rear of
9 the room.

10 And we also on that table have two copies of
11 the Draft Environmental Impact Statement. You're
12 welcome to look at those, to glance through those,
13 however, they are display copies.

14 If you would like your own copy of the Draft
15 Environmental Impact Statement, Neil Hoffman is holding
16 up a disk. On the table in the back we have a pile of
17 disks of the Draft EIS, you're welcome to take one of
18 those disks.

19 In addition, the Draft EIS is available on
20 our website as well.

21 If we have time after our speakers are
22 finished, we'll have an informal session in the back of
23 the room.

24 The purpose of this session is for us to
25 answer clarifying questions about our process, not to

1 discuss or debate the issues or announce these in the
2 Draft EIS.

3 It's very important to remember that any
4 comments provided during this informal session are not
5 on the record. To be on the record, your comments must
6 be provided either during the listening session or as a
7 written comment.

8 This concludes our introduction. We'll now
9 begin to take your comments. And I will take them in
10 the order in which people signed up.

11 And our first comment is -- comes from Terry
12 Cayko.

13 Terry, if you could come to the mike, please.

14 State your name, spell your name and tell us
15 any affiliation if you have one. Thank you.

16 MR. CAYKO: Committee members. My name is
17 Terry Cayko, and it is spelled: T-e-r-r-y C-a-y-k-o.

18 I'm a family farmer growing sugar beets in
19 McKenzie County in northwestern North Dakota along the
20 Montana-North Dakota border.

21 I've grown sugar beets for over 40 years for
22 Sidney Sugars, Incorporated. And I am the past
23 president of the Montana-Dakota Sugar Beet Growers
24 Association and currently serving as a director on the
25 board.

1 I typically farm 370 acres of sugar beets
2 each year. They are in a three-year rotation with
3 spring wheat, barley or durum.

4 For the past four years, 2008 through 2011, I
5 have planted 100 percent of my sugar beets with Roundup
6 Ready seed.

7 I currently grow Roundup Ready sugar beets
8 under compliance agreements between APHIS and Sidney
9 Sugars, Incorporated.

10 I appreciate the hard work reflected in the
11 Draft Environmental Impact Statement prepared by APHIS.
12 I support proposal Alternative 2, full deregulation of
13 Roundup Ready sugar beets.

14 There are many benefits provided by Roundup
15 Ready sugar beet technology. Weed control is a major
16 challenge in sugar beet farming in our growing area.

17 Since we irrigate from the Yellowstone and
18 Missouri Rivers, there are a lot of weed seeds that
19 come into our fields. And to control these weeds before
20 Roundup Ready sugar beets, we had to apply as many as
21 six different herbicides and apply them at four timely
22 applications.

23 You can't always have perfect weather when
24 you have such a narrow window for application when
25 these herb -- different herbicides have to be applied

1 in five to seven-day intervals.

2 These herbicides are more toxic and you have
3 a longer waiting period after application before your
4 workers can return to the fields.

5 There was always weed escapes and it was hand
6 -- it was hard and scarce to find hand labor and they
7 were very costly. The effect on the sugar beets always
8 stunted growth at least 10 to 14 days.

9 With Round -- Roundup Ready sugar beets, two
10 to three applications is very effective weed control
11 for the growing season. It is also much more flexible
12 in application timing and not as weather dependent.

13 Other environmental benefits include reduced
14 tillage, fewer passes through the fields with tractors,
15 meaning less fuel and lower emissions. Reduced risk
16 herbicides and little or no hand labor equals less
17 human exposure to more toxic chemicals.

18 Good stewardship practices have always
19 contributed to better yields and reduced farming
20 challenges, like weed competition and weed resistance.

21 The partial deregulation and compliance
22 agreements did not meaningfully change the way I farm
23 because key requirements of that program were already
24 part of my farming practices. For example, crop
25 rotation, identification and removal of bolters, weed

1 resistance training, and maybe most important,
2 application of herbicides at required rates.

3 My Technology Use Agreement with Monsanto
4 also requires that I follow certain stewardship
5 requirements.

6 Before planting Roundup Ready sugar beets, I
7 underwent considerable training on the use of Roundup
8 Ready technology and annual herbicide, weed resistant
9 training. Also, use of crop rotation to reduce weed
10 pressures and the likelihood of resistant weeds through
11 different modes of action are a must.

12 In my growing region, there's no risk of
13 cross-pollination from Roundup Ready sugar beets.

14 First, you don't let beets flower. They are
15 harvested in the first year. They only flower in the
16 second year. There are rare first-year bolters and if
17 they are, they are removed and destroyed.

18 Second, even if a sugar beet were left in the
19 ground, it would not survive the winter in our growing
20 area with wint -- with temperatures well below zero for
21 ex -- extended periods of time.

22 And, third, sexually compatible table beets
23 and chard are not grown in our region.

24 The impact of the loss of Roundup Ready sugar
25 beet technology would be devastating for our growing

1 region. Operating costs would increase immensely.
2 Chemical costs would be very high and you may not even
3 be able to obtain these chemicals anymore.

4 Our region would have reduced acreage and may
5 very well cause the factory in Sidney, Montana, to
6 close because there would not be enough sugar beets to
7 run the factory profitably.

8 We would like to be able to turn our
9 operations over to the next generation.

10 Thank you.

11 MR. GEORGE: Thank you, Mr. Cayko.

12 Our next speaker will be Steve Sing, please.

13 MR. SING: Good afternoon. My name is Steven
14 Sing. S-t-e-v-e-n S-i-n-g.

15 And I live in Sidney, Montana. And I've been
16 involved with sugar beet production and processing for
17 36 years.

18 During the first 27 years, I was employed by
19 American Crystal Sugar Company as an agriculturalist,
20 ag manager and ag operations manager.

21 Last nine years, I've been the general
22 manager of Sidney Sugars, Incorporated, in Sidney,
23 Montana. Our growing area covers northeast Montana and
24 northwest North Dakota.

25 Sidney Sugars, Incorporated, is a wholly-

1 owned subsidiary of American Crystal Sugar Company.
2 The factory's been in continuous operation since 1925.
3 It's been a very important part of the economy in that
4 region of the country.

5 The factory pays more than \$45 million to the
6 sugar beet growers for their crop and over \$8 million
7 in wages and benefits to our 245 employees.

8 We're one of two sugar beet processing plants
9 in the United States that is not a cooperative. It's a
10 very important fact because of how our contract to grow
11 sugar beets works.

12 A proposed contract is negotiated between
13 Sidney Sugars, Incorporated, and the Montana-Dakota
14 Sugar Beet Growers Association.

15 The contract can cover several years at a
16 time. Individual growers, however, sign a one-year
17 agreement to provide sugar beets to the factory.

18 They can grow the crop one year and if the
19 economics change, they can decide to not grow the crop
20 in subsequent years.

21 The acreage trend since we acquired the
22 factory shows this very well. Declines in weed control
23 effectiveness and resulting poor yields received in
24 some areas cause the growers to look for more
25 economical and profitable avenues to pursue on their

1 farm.

2 In 2003, growers contracted 41,500 acres. By
3 2008, this total had dropped to 15,300 acres.

4 2009, growers started using a Roundup Ready
5 sugar beet variety extensively and the crop contracted
6 rose to 24,900 acres. And it rose again in 2010 to
7 31,100.

8 All the acres since 2009 have been Roundup
9 Ready sugar beets.

10 Because these new varieties proved to save
11 the growers money, time and reduced exposure to
12 chemicals, the acres contracted in 2011 were 33,200.

13 Sidney Sugars, Incorporated, Incorporated,
14 appreciates the hard work done by many people in APHIS
15 to prepare a thorough Draft Environmental Impact
16 Statement. We support proposal Alternative 2, full
17 deregulate -- deregulation of Roundup Ready sugar
18 beets.

19 Weed control and stand establishment in the
20 spring are two of our, our growers' major challenges.
21 Our growers are very progressive and they fight weeds
22 every year. This is because the irrigation water to
23 grow the crop is provided by an open canal system over
24 400 miles long. New batches of weed seeds are brought
25 into the fields every year through the irrigation

1 water.

2 Without Roundup Ready sugar beets, growers
3 must use combinations of herbicides to try to control
4 these weeds. This results in several applications that
5 must be exactly timed and started when the beets are
6 very small.

7 Conventional herbicides needed for weed
8 control inhibit the growth of the small crop and result
9 in a loss of seedlings and reduction in the final
10 stand.

11 Growers can effectively use less chemical to
12 grow the crop by planting Roundup Ready sugar beets.
13 This reduces their cost and increases the yield because
14 the crop is not held back.

15 It is also safer than using several chemicals
16 in combination to accomplish less weed control.
17 Because Roundup reduces the weed pressure, the factory
18 runs much better, we don't have the trash to handle and
19 plug up machinery and reduce the amount of sugar
20 extracted from each ton of sugar beets that the growers
21 deliver.

22 Roundup Ready sugar beets are also
23 environmentally beneficial. Using Roundup herbicide to
24 control weeds reduces the amount of tillage needed to
25 raise the crop. This means fewer trips through the

1 field, uses less fuel than conventional varieties and
2 lower emissions to the air.

3 Roundup Ready herbicide is also less risky to
4 use than conventional herbicides. Because weeds are
5 efficiently killed by Roundup, fieldworkers are less
6 exposed to chemicals that are more toxic.

7 Our grower practices -- our growers practice
8 good stewardship every year, they always have. They
9 rotate their crops to reduce disease, apply chemicals
10 at the proper rates, identify and remove bolters and
11 attend continuing education classes provided on weed
12 resistance training and proper tillage techniques to
13 reduce erosion.

14 These stewardship practices are part of the
15 annual training provided by the agricultural staff at
16 our grower meetings.

17 If we lose the use of Roundup Ready sugar
18 beet technology, the acres planted for Sidney Sugars,
19 Incorporated, will decline.

20 Their op -- the growers' operating costs and
21 ours will sh -- will rise sharply. They will switch to
22 more profitable crops. This could have a very serious
23 affect on the ability of Sidney Sugars, Incorporated,
24 to survive.

25 If Sidney Sugars, Incorporated, closes its

1 doors, it would have a devastating affect on many, many
2 families and business -- businesses in northeastern
3 Montana and northwestern North Dakota.

4 Thank you.

5 MR. GEORGE: Thank you, Mr. Sing.

6 Next will be David Berg, please.

7 MR. BERG: Good afternoon. David Berg.

8 President and chief executive of American Crystal Sugar
9 Company based in Moorhead.

10 On behalf of 2,850 shareholders of American
11 Crystal, we would like to welcome you to the Red River
12 Valley. It is one of the most concentrated and one of
13 the most efficient sugar beet production, processing,
14 production and processing regions in the world.

15 American Crystal's grateful for the
16 opportunity you're giving us today to provide input on
17 a subject of a lot of importance to our grower/owners.

18 We're appreciative of the very open and
19 collaborative approach that USDA has demonstrated in
20 arriving at sound and science-based, decisions based
21 related to the potential deregulation of Roundup Ready
22 sugar beets.

23 As we're aware, the population of the world
24 recently passed the 7-billion person mark. Population
25 growth continues at a dramatic pace. And I don't

1 believe any of us are in the position to completely
2 rule out a branch of agricultural research or
3 technology.

4 Farmers and food processors must be able to
5 continue to develop their productivity and efficiency.
6 To do otherwise is to condemn literally millions of
7 current and future people to lives of hunger or even
8 starvation.

9 I believe biotechnology's one of the most
10 important tools which farmers must have access to.

11 As I said earlier, there are approximately
12 2,850 shareholders who cooperatively own and operate
13 American Crystal.

14 2011, the company's shareholders harvested
15 approximately 442,000 acres of sugar beets or around 37
16 percent of the total U.S.

17 harvested in the area. Final data are not
18 yet available, but our estimate is that 84 percent of
19 these acres were planted to Roundup Ready varieties.

20 Production of Roundup Ready sugar beets
21 during 2011 at American Crystal was conducted pursuant
22 to the compliance agreements with USDA, consistent with
23 the environmental assessment, assessment issued by the
24 agency earlier this year.

25 To my knowledge, the effort was nearly

1 universally successful.

2 Poor early-season growing conditions in the
3 Red River Valley caused many American Crystal growers
4 to remark that they were extremely happy to have access
5 to Roundup Ready this year.

6 Wet field conditions during much -- in -- of
7 May and June would have made it extremely difficult to
8 nearly impossible to perform weed control with
9 conventional varieties this year.

10 American Crystal and its shareholders
11 appreciate the large, careful effort that USDA has
12 contributed in preparation for issue -- issuance of the
13 Draft Environmental Impact Statement on October 11th of
14 this year.

15 We believe the EIS presents an exhaustive
16 record of the potential impacts of use of Roundup Ready
17 and we fully endorse the proposed Alternative 2, full
18 deregulation of Roundup Ready sugar beet technology.

19 My experience at American Crystal includes
20 the position of vice president of agriculture. During
21 the time I held that job, I gained firsthand knowledge
22 of the critical importance of weed control in sugar
23 beet production.

24 A variety of weeds threaten the economic
25 viability of the beet crop, and in, in any single year,

1 a sugar beet field can be strangled to the level of
2 economic loss by poor weed control.

3 The benefits of Roundup Ready sugar beets are
4 well documented in the Draft EIS and in other
5 publications from USDA, as well as from academic and
6 private researchers.

7 The chief benefits include reduced field
8 tillage, which provides fuel savings.

9 Use of Roundup Ready herbicide means a large
10 volume of alternative, more toxic herbicides can be
11 avoided.

12 Also, the broad spectrum control afforded by
13 Roundup Ready makes it much less likely that hand labor
14 needs to be deployed.

15 It's also important to point out that the
16 ownership structure of American Crystal means a
17 cooperative stock and op -- and overall farming
18 operations are almost always passed from generation to
19 generation. This highlights the importance that
20 farmers in the region place in careful stewardship of
21 their land. They understand and by nature can adapt to
22 their careful measures involved in a partial
23 deregulation in place during 2011.

24 American Crystal provides multiple
25 opportunities each year where agronomy staff delivers

1 direct training to small groups of producers. Best
2 practices related to weed control has always been a
3 part of this training. And in the past year, adherence
4 to compliance agreements was a major part.

5 The high prevalence of Roundup Ready
6 varieties among our shareholders indicate this
7 technology's an important element in their agro --
8 agronomic toolbox. It provides flexibility in the
9 timing of herbicide application during extremely busy
10 periods. This flexibility allows them to perform tasks
11 related to other crops at their farms on, at optimal
12 times, adding to their overall efficiency and success.

13 One important aspect of Roundup Ready
14 varieties may be unique to our northern climate. The
15 preharvest interval for application of Roundup on a
16 sugar beet field is 30 days, while for other
17 nonGlyphosate herbicides, the interval is as long as 90
18 days.

19 In Minnesota and North Dakota, cold spring
20 weather frequently delays planting the sugar beet crop.
21 This frequently means the last permissible date to
22 apply alternative herbicides is beyond the preharvest
23 interval.

24 As a practical matter, this could mean that
25 no herbicide application may be made for critical

1 periods during the growing season. This could have
2 extremely negative consequences for the affected
3 grower.

4 The very rapid adoption of Roundup Ready
5 varieties among American Crystal shareholders indicates
6 this technology fits their agronomic and economic
7 needs.

8 I believe it's clear that losing Roundup
9 Ready as an option would bring about serious, negative
10 outcomes for individual American Crystal growers and
11 for the cooperative as a whole.

12 These outcomes would be very likely reduced
13 total sugar beet acreage and production which would
14 limit the co-op's total volume. Because sugar beet
15 processing is a high fixed-cost business, having
16 sufficient volume of beets to process is a key economic
17 driver for the company.

18 Reduced acreage and production would have a
19 large, negative effect on grower payment, and, in turn,
20 profitability.

21 In summary, American Crystal's grateful to,
22 grateful to USDA for the work it's done to allow the
23 usage of Roundup Ready technology. Most importantly,
24 the company strongly endorses full dereg -- full
25 deregulation option for which USDA has indicated as its

1 preferred option.

2 Thank you again for this opportunity to share
3 this recommendation today.

4 MR. GEORGE: Thank you, Mr. Berg.

5 Our next speaker is Curt Knutson.

6 MR. KNUTSON: Good afternoon. My name is
7 Curtis Knutson, or Knutson if you're from the
8 Southeast. It's spelled: C-u-r-t-i-s K-n-u-t-s-o-n.

9 I am a farmer. I wish to speak in favor of
10 the USDA's Alternative 2, full dereg -- deregulation of
11 Roundup Ready sugar beets.

12 I have grown sugar beets for 40 years in Polk
13 County in Minnesota.

14 I also serve on the board of directors for
15 American Crystal Sugar Company and currently serve as
16 the chairman of the ag committee for the board.

17 I also work as a sales agent for the Crystal
18 beet seed division.

19 We farm about 4,000 acres of wheat, soybeans
20 and sugar beets. We have a small herd of Angus cattle.
21 We also breed and raise quarter horses for our own use.
22 We also custom farm 1500 acres. Along with raising a
23 thousand acres of sugar beets for American Crystal
24 Sugar Company, we custom farm 500 acres of sugar beets
25 for a neighbor.

1 We have been raising Roundup Ready sugar
2 beets since 2008. In 2008, we raised 66 percent of our
3 crop using Roundup Ready seeds. And since then, we have
4 been about a hundred percent Roundup Ready grow on our
5 sugar beet crop.

6 We currently raise Roundup Ready sugar beets
7 under the compliance agreement between APHIS and
8 American Crystal Sugar Company.

9 We appreciate the hard work done by APHIS in
10 the Draft Environmental Impact Statement. We fully
11 support Alternative 2, full deregulation of Roundup
12 Ready sugar beets.

13 On our farm, Roundup Ready technology has
14 allowed us to become better producers of sugar. It has
15 allowed us to be -- to better manager of time in the
16 weed growing season. We have much better weed control
17 in our sugar beets, which allows us better yields, less
18 exposure to harsh chemicals for ourselves and for our
19 employees.

20 The costs for, the costs for weed control are
21 similar to growing conventional seeds, but because we
22 can use less tillage and cultivation, Roundup Ready
23 seeds have allowed us to cut our fuel costs, produce
24 less pollution because we are running our tractors
25 less. And we've also have, have less labor costs.

1 It also lets us be less reliant on good
2 weather, because our window of application for
3 herbicides is much wider. That reduces stress on all
4 our farm employees.

5 Conventional herbicides are more toxic and
6 need to be applied on a five to seven-day interval,
7 even if the weather does not permit and was a dreaded
8 part of our summer growing season.

9 We used to be a five-spray applica -- what
10 used to be a five-spray application season with
11 conventional herbicides is now a two and sometimes
12 three-application season with Roundup Ready seeds and
13 much less time sensitive.

14 Allowing us to pick much better weather
15 conditions to apply herbicide, which -- with, with much
16 less exposure, and above all, much less stress.

17 We are burning much less expensive fuel and
18 putting less harmful emissions into the air.

19 The particular -- the partial deregulation of
20 Roundup Ready technology has not changed our farming
21 practices much. Most of the requirements are the
22 compliance agreement that were already used to meet --
23 excuse me. Most of the requirements of the compliance
24 agreement were already used to meet the Technology Use
25 Agreement with Monsanto.

1 We had already been destroying bolters during
2 the growing season and properly following labels and
3 application of Glyphosate herbicides. Keeping records
4 on seed used and where they were planted has always
5 been part of our farming program before and continues
6 to be applied now.

7 Other requirements on crop rotation and
8 proper training of employees was a part of our farming
9 practices before the com -- compliance agreement.

10 Proper monitoring of resistant weeds and use
11 of proper chemicals has always been part of our weed
12 control program.

13 There is also no risk of cross-pollination of
14 sugar beets in our growing region, region, as we have
15 always rogued bolters as a good husbandry practice.

16 We do not let bolters flower, it is not
17 allowed under the Monsanto agreement.

18 Furthermore, freezing winters virtually
19 ensure that any beet left in the field would not
20 produce a viable seed the following year. It is simply
21 destroyed by the extremely cold winters.

22 If we lost the ability to use Roundup Ready
23 technology on our farm, it would mean reduced sugar
24 production from each acre and increased costs for each
25 growing -- for growing each acre.

1 It would also probably cut our life shorter,
2 due to added stress to an already risky way of life.

3 On the company side of the issue, Roundup
4 Ready technology allows our ag staff to spend much less
5 time on weed control issues with growers. That allows
6 them to concentrate on other important issues that
7 arise like disease outbreaks, crop-size projection --
8 projections that influence the start-up times for our
9 factories.

10 Growers have adopted the new Roundup Ready
11 technology on a vast majority of their acres. It is
12 estimated that less than 1 percent of our acres will be
13 planted to conventional varieties this coming season.
14 It seems to be a much preferred system of sugar beet
15 production.

16 Because of the ease of Roundup Ready
17 technology, risk from growers, risk from growers moving
18 into alternative crops is reduced, ensuring an adequate
19 supply of raw product to run our mills in an efficient
20 manner.

21 Other crops are easier to grow and with comm
22 -- competitive commodity prices, attracting acres for
23 sugar beets needed has been a problem in the past.
24 With Roundup Ready technology, the risk has been
25 reduced.

1 As a sales agent for Crystal seed, it has
2 always been important to sell high quality, high-
3 producing seeds to my neighbors and friends.

4 Our coopera -- our cooperative has always had
5 a refined system of official multiyear coded tests to
6 ensure good quality seed. That includes testing for
7 traits of disease and pest tolerance, vigor, bolters,
8 purity, stand establishment and sugar yield per acre.

9 This system was in place long before Roundup
10 Ready sugar beets. Each variety must meet standards to
11 be placed on the approved list.

12 Growers in our region must plant only seeds
13 from this approved list. It has ensured that seeds we
14 grow are safe and productive for our region.

15 Our system of approval will continue to do
16 the same in the future.

17 Thank you very much.

18 MR. GEORGE: Thank you, sir.

19 Our next speaker is Beau Bateman.

20 MR. BATEMAN: Good afternoon. My name's Beau
21 Bateman. That's bravo, echo, alpha, uniform. Bateman,
22 like Batman with an E in the middle.

23 I'm a farmer from Grand Forks, North Dakota,
24 we grow sugar beets for American Crystal Sugar Company.
25 I'm also the chairman of the research and education

1 board for Minnesota-North Dakota Sugar Beet Research.

2 So I can talk to you from that perspective.

3 We have, on an annual basis, three-quarters
4 of a million dollars raised by farmers to dedicate
5 towards research.

6 There is a radio program on Public Radio
7 called Car Talk, two brothers, Tom and Ray Magliozzi,
8 seek to determine problems with automobiles through
9 call-in telephone.

10 They eliminate different parts of the problem
11 to try and get to what the person will call in and say
12 is a wobble in my car by asking left turn, right turn,
13 are you going forward, backward, when did it start,
14 have you changed your tires.

15 They need to eliminate all these extra
16 variables, these extra noise, if you will, to determine
17 the problem.

18 In research, we've got a lot more issues than
19 just weed control. But the use of Roundup Ready sugar
20 beets enables us to control the weeds and reduce or
21 eliminate one of the variables in our research projects
22 that makes the rest of the data more clean. It
23 accelerates the adoption of new information, new
24 technology to help us control insects and soil-borne
25 diseases by eliminating the noise that comes from weed

1 control.

2 In addition, we're exploring hyperspectral
3 retina -- reflectance data, airplane and satellite
4 data. If we can reduce the variability of reflectance
5 of a sugar beet crop just as they produce a stress,
6 which would change the reflectance of the beet leaf as
7 recorded, then we can get more consistent data.

8 So from that perspective, those of us farmers
9 that all contribute to research that's spent at the
10 USDA Agricultural Research Center here in Fargo, as
11 well as both land-grant colleges of NDSU and University
12 of Minnesota, we support full deregulation of the
13 Roundup Ready genetic to enable us to accelerate and
14 discover new products to help us control issues beyond
15 simply weeds in the production of sugar beets.

16 Thank you.

17 MR. GEORGE: Thank you very much.

18 Kelvin Thompsen.

19 MR. THOMPSEN: Good afternoon. My name is
20 Kelvin Thompsen. K-e-l-v-i-n T-h-o-m-p-s-e-n.

21 I serve as president and CEO of Southern
22 Minnesota Beet Sugar Cooperative, SMBSC for short,
23 located in Renville, Minnesota.

24 SMBSC was formed in 1975, is a hundred
25 percent grower owned by some 509 shareholder/producers

1 who raise 120,000 acres of sugar beets.

2 Shareholders' sugar beets are then refined in
3 their factory to produce in excess of 700 million
4 pounds of pure white sugar.

5 SMBSC' sugar production alone is a very
6 essential food ingredient to the diets of nearly 10.8
7 million Americans given today's per capita consumption
8 rate.

9 SMBSC' shareholders produce some 3 million
10 tons of sugar beets in 17 counties located in southern
11 Minnesota.

12 SMBSC's factory employs over 280 year-round
13 people, in addition to 450 seasonal employees during
14 the sugar beet harvest.

15 Sugar beet and sugar production is a vital
16 contributor to the local economies of southern
17 Minnesota, with a cash infusion of nearly \$750 million
18 annually.

19 The maintenance of infrastructure, schools,
20 et cetera, of Renville County rely heavily on the
21 nearly \$1 million of property taxes paid by SMBSC
22 annually.

23 Roundup Ready sugar beets were first grown by
24 our shareholders in 2008. And by 2010, the adoption of
25 Roundup Ready sugar beet varieties increased to 99

1 percent of the co-op's acreage.

2 In 2011, SMBSC's shareholders planted over
3 119,000 acres using Roundup Ready sugar beet varieties.

4 Prior to 2008, and the availability of
5 Roundup Ready sugar beet varieties, our cooperative
6 relied entirely on the use of tank mixes, which
7 included several conventional herbicides required for
8 weed control.

9 The use of conventional herbicides required
10 many field applications with a very narrow opportunity
11 window for application.

12 Weather and temperature variations negatively
13 impacted the effectiveness of conventional herbicides.
14 Weed control's marginal at best, plant injury was high
15 and the result was lower crop yields and poorer sugar
16 beet quality.

17 In addition, human exposure to more toxic
18 chemical was much greater when our only choice was to
19 use conventional herbicides.

20 Weed control is a significant challenge in
21 sugar beet farming. SMBSC's use of Roundup Ready sugar
22 beet variety since 2008 has significantly improved our
23 weed control, reduced sugar beet plant injury and
24 increased our harvested yields per acre.

25 Many other benefits have been realized with

1 planting of Roundup Ready sugar beet varieties at
2 Southern Minnesota Beet Sugar, such as fewer passes
3 across the field with a tractor, less fuel required,
4 lower emissions, and more importantly, less human
5 exposure to more toxic chemicals.

6 SMBSC's growing area recorded at least 20
7 inches of rainfall from March to July of 2011. The
8 resultant crop yield was just over 17 tons per acre.
9 Our normal yield prior to this year has averaged nearly
10 26 tons per acre.

11 Although this year's crop yield was depressed
12 by a significant rainfall and cold weather experienced
13 during the growing season, or I should say, lack of a
14 growing season, the end result would have been disaster
15 if our shareholders would have planted conventional
16 sugar beet varieties and used conventional herbicides.

17 Critical application timings required with
18 the use of conventional herbicides would have been so
19 disrupted by the frequent rain -- rainfall, that weed
20 growth would have surpassed crop growth. Many fields
21 would have been abandoned and crop yields would have
22 been significantly less than they were.

23 This would have been an economic disaster for
24 Southern Minnesota Beet Sugar Cooperative and the
25 economies in southern Minnesota.

1 The planting of Roundup Ready sugar beet
2 varieties in SMBSC's growing area in 2011 avoided
3 serious economic disaster for the cooperative and its
4 shareholders.

5 In addition, any future loss of the Roundup
6 Ready technology would force growers to produce crops
7 other than sugar beets and reduce the available sugar
8 beet acreage to our cooperative.

9 Lower sugar beet volume would increase
10 operating costs, lower shareholder payments to a point
11 at which the cooperative's sustainability could be very
12 short-term.

13 Prior to the partial deregulation of Roundup
14 Ready sugar beet, our shareholders already implemented
15 good stewardship practices. Lengthening of crop
16 rotations to assist in dise -- disease control,
17 alternation of fungicide chemistries to reduce disease
18 resistance, application of herbicides at required rates
19 and weed resistance training are just a few examples of
20 good stewardship practices which have been in place for
21 several years.

22 SMBSC appreciates the hard work by APHIS,
23 which is reflected in the Draft Environmental Impact
24 Statement. SMBSC strongly supports proposed
25 Alternative No. 2 in the Draft EIS for the full

1 deregulation of Roundup Ready sugar beets.

2 Thank you for your time.

3 MR. GEORGE: Thank you.

4 Keith McNamara.

5 MR. McNAMARA: Good evening. My name's Keith
6 McNamara. K-e-i-t-h. McNamara, M-c-N-a-m-a-r-a.

7 I reside on our third-generation family farm
8 near Bird Island, Minnesota. I am a farm operator.
9 Farm -- our farm operation cultivates land in Renville
10 and surrounding counties in southern Minnesota.

11 I've grown sugar beets for 18 years and our
12 family unit has grown sugar beets since the 1960s.
13 Growing sugar beets on our farm is a part of my
14 heritage and has allowed for economic stability.

15 And I've served on the Southern Minnesota
16 Beet Sugar Cooperative board since 2003, in various
17 roles, and served on numerous board committee.

18 And I've also served on the Sugar Beet
19 Research and Education Board of Minnesota and North
20 Dakota for the past three years. Last year, I was
21 elected to the American Sugar Beet Growers board.

22 The crops that are grown in our cropping
23 rotation are corn and soybean, navy beans, sugar beets
24 and some alfalfa.

25 We raise a thousand acres of sugar beets

1 annually on our farm in a four-year rotation. We have
2 grown Roundup Ready sugar beets for four years.

3 In 2008, when Roundup Ready sugar beets came
4 out, we planted our allotted amount. In 2009 and '10,
5 we have planted a, a hundred percent Roundup Ready
6 sugar beets.

7 I currently grow Roundup Ready sugar beets
8 under compliance agreements between APHIS and Southern
9 Minnesota Beet Sugar Cooperative.

10 The use of Roundup Ready technology in sugar
11 beets has allowed for many bene -- beneficial
12 agronomic, cultural changes to take place in our
13 operation. Weed control in our sugar beets is achieved
14 in three sprayings versus five sprayings for a
15 conventional sugar beet herbicide.

16 Roundup Ready technology has a greater window
17 for timing of application in comparison to the
18 conventional herbicide that had to be sprayed on a
19 strict seven to ten-day interval.

20 We are able to maintain season-long control
21 without expensive hand laborers that are hard to find.

22 Row crop cultivation is virtually eliminated
23 as weed co -- as a weed control aid. Less passes in the
24 field means less diesel fuel burnt and results in more
25 soil conservation.

1 The quality of life goes up because we are
2 not exposed to as many harmful toxins and have more
3 time for family.

4 My personal sugar beet yields in 2011 were
5 not exceptional, but I still am grateful to have been
6 able to plant Roundup Ready sugar beets in 2011.
7 Without it, our crop would have been a total disaster.
8 And with the wet spring, we were unable to have
9 consistent application. And thanks to this technology,
10 we'll still -- we were still able to achieve weed
11 control and a reasonable crop for the challenging year
12 it was.

13 The shareholder resources committee and staff
14 at SMBSC go to great lengths to ensure that our growers
15 obtain the best possible seed for the upcoming sugar
16 beet crops. The committee diligently reviews the
17 entries that are entered into the coded variety trials.

18 Factors that are evaluated in candidate
19 varieties are: disease tolerance, performance in our
20 growing region, observation for bolters, varietal
21 purity, stand establishment, yield in both tons per
22 acre and re -- recoverable sugar per acre.

23 When varieties have met our three-year
24 testing period, period criteria, they are placed on a
25 fully-approved variety list.

1 Our growers at SMBSC can only plant what is
2 offered on this approved list. This process is very
3 important to the long-term viability of SMBSC. It was
4 in place prior to the Roundup Ready sugar beets.

5 I have great appreciation for the effort that
6 has gone into the Draft Environmental Impact Statement
7 prepared by APHIS.

8 As a grower, director -- direct -- and
9 shareholder, I support full deregulation of Roundup
10 Ready sugar beets described as Alternative No. 2 in the
11 Draft EIS.

12 Thank you.

13 MR. GEORGE: Thank you.

14 Next is Marc Stevens.

15 MR. STEVENS: Thank you for allowing me to
16 speak this afternoon. My name is Marc Stevens. M-a-r-
17 c S-t-e-v-e-n-s.

18 I live and work on the farm I grew up on
19 northeast of Montevideo, Minnesota. My wife and I have
20 farmed since I graduated from the University of
21 Minnesota in 1987.

22 I bought my first beet shares in 1990. And
23 currently raise sugar beets, corn, soybeans, sweet corn
24 and sweet peas. We farm about 1400 acres,
25 predominantly with family labor.

1 Growing sugar beets on our farm is a vital
2 part of my operation and has allowed for a longer
3 rotation and economic diversity.

4 I have served on the Southern Minnesota Beet
5 Sugar Cooperative board since 2008 and have
6 participated on numerous board committees since
7 joining. I've also been active at the county and state
8 level of other commodity groups and Minnesota Farm
9 Bureau.

10 I was slow to adopt Roundup Ready technology
11 when it became available in soybeans but was quick to
12 adopt it in sugar beets, due to my understanding and
13 faith in the technology.

14 I've grown Roundup Ready sugar beets for four
15 years. I currently grow Roundup Ready sugar beets
16 under compliance agreements between APHIS and Southern
17 Minnesota Beet Sugar Cooperative.

18 The use of Roundup Ready technology in sugar
19 beets has allowed for many beneficial agronomic and
20 cultural changes to take place in my operation.

21 With Roundup available to me, I have a tool
22 that gives me confidence in being able to control tough
23 weeds even when Mother Nature throws me curve balls,
24 like this past growth -- growing season.

25 Roundup has a greater window for timing of

1 application in comparison to conventional herbicides
2 that had to be sprayed on a strict seven to ten-day
3 schedule.

4 I'm able to maintain season-long weed control
5 without hand laborers with the addition of Roundup to
6 our available chemicals.

7 I still have my row crop cultivators, but did
8 not have to use them this last year.

9 Less passes in the field means less diesel
10 fuel used and results in more, more soil conservation.
11 But more importantly, fewer passes in the fields means
12 I have more time to spend with my family.

13 As stated earlier, I have great faith in the
14 Roundup Ready technology and believe it to be safe for
15 myself, my family and the people around the world who
16 are benefited by the production of safe, affordable
17 food that U.S. farmers raise.

18 I have a great appreciate for the effort that
19 has gone into the Draft EIS prepared by APHIS.

20 As a SMBSC grower, shareholder and director,
21 I support Alternative 2, full deregulation of Roundup
22 Ready sugar beets in the Draft EIS.

23 Thank you.

24 MR. GEORGE: Thank you.

25 Our next speaker is Douglas Etten.

1 MR. ETTEN: Good afternoon. I'm Doug Etten,
2 E-t-t-e-n.

3 I raise sugar beets in Wilkin County, in west
4 central Minnesota. And I've grown beets since 1974 for
5 Minn-Dak Farmers Co-op. I've been on the board of
6 directors since 1997, and for the past four years, have
7 had the honor to serve as chairman.

8 I also serve on the board of directors of the
9 American Sugar Beet Growers and, for the past number of
10 years and continue in that role currently.

11 I farm together with my two sons and we
12 typically raise around 1200 acres of sugar beets.

13 We've had access to Roundup Ready sugar beets
14 since 2008, when we had around 50 percent Roundup Ready
15 seed.

16 Since that time, we've had a hundred percent
17 Roundup Ready beet seed.

18 For 2011, we were very grateful to have the
19 ability to raise Roundup beets under the compliance
20 agreements between APHIS and Minn-Dak Farmers Co-op
21 through the partial, partial deregulation.

22 And we now have the Draft EIS available for
23 comments and we appreciate all the hard work that APHIS
24 has done and got this together for going forward.

25 For the sugar beet crop under the

1 conventional system, weed control was always a
2 challenge. Whenever we would encounter reduced stands
3 of beets in areas of a field, or entire fields, we
4 would inevit -- inevitably have a weed-infested mess to
5 deal with.

6 The chemicals we had available were
7 ineffective, since the weeds quickly became too large
8 to control when the sugar beets did not form a good
9 canopy.

10 With the option of Roundup Ready beets, we
11 can now control the weeds in those problem areas. And
12 this has led to better, cleaner and higher, higher
13 quality crops for our farm.

14 This past year, our co-op experienced excess
15 moisture for roughly two-thirds of the growing season
16 over a large portion of our 120,000 acres.

17 Many of the fields in these areas suffered
18 from sickly beets and reduced stands, which is the
19 perfect scenario for weeds to thrive.

20 Under the con -- conventional system, we
21 would have needed to spray these fields three to four
22 times at seven-day intervals, with a tank mix of
23 anywhere from three to five different chemicals, plus
24 additives.

25 With the frequent rain events of a year like

1 we experienced in 2011, that spray schedule becomes
2 impossible to manage and the weeds quickly can take
3 over.

4 But now with Glyphosate, those weeds that get
5 too large can still be controlled.

6 Typically Glyphosate takes care of a field in
7 two passes, but in, in years like this, with extreme
8 cases of weeds, we sometimes need a third pass.

9 Under the conventional system, many of the
10 fields in these wet areas would have been abandoned
11 this year due to the weeds. But with Roundup beets,
12 these fields were almost totally harvested.

13 This difference also has a huge financial
14 impact to our crop insurance.

15 With the introduction of Roundup Ready beets,
16 we have the abilit -- ability to become more environ --
17 environmentally friendly as well.

18 As mentioned, we can reduce field passes for
19 spraying by two times on average. We can also reduce
20 our tillage significantly.

21 The need to cultivate after planting is
22 almost eliminated, saving two to three passes.

23 This also allows us to leave more residue on
24 the surface without the problem of plugging our
25 cultivators.

1 This has the potential to save on some of our
2 fall, tillage in the preceding fall and also leave more
3 residue on the surface, which is a -- good for the
4 environment and the carbon and all, all that besides.

5 All these things lead to less fuel
6 consumption and equipment wear and tear.

7 With all the potential for the environmental
8 benefits, it's hard to imagine how so-called
9 environmentalists can argue against this technology.
10 Especially since Glyphosate is also a lower-risk
11 chemical than the conventional chemicals we have
12 available.

13 To address the issue of re -- of weed
14 resistance on our farm, we have started the use of
15 different families of chemicals on our corn and soybean
16 crops.

17 We use Glyphosate on the corn, plus another
18 pass with Status.

19 On soybeans, we're switching to other modes
20 of action, such as LibertyLink soybeans.

21 We also have wheat in our four-year rotation
22 and we treat the wheat with Bronate, which also helps
23 to stop any chance of resistance developing.

24 For the past four years, under the Roundup
25 Ready stewardship agreement, we have had the

1 responsibility to control bolters. Most years' bolters
2 are nonevents, as was the case on our, on our farm in
3 crop year 2010.

4 On our 1200 acres, we removed a total of four
5 bolters. So with roughly 40,000 plants per acre, that
6 amounts to one bolter for each 120 million plants.

7 In 2011, one variety had some additional
8 bolters, but still a very controllable amount.

9 Having grown sugar beets for 37 years and
10 seeing a minimal presence of bolters each year, to my
11 knowledge, we have never had a cross-pollination --
12 crop -- cross-pollination issue with any other plants
13 in our region.

14 So for all of the above-mentioned reasons, I
15 strongly support Alternative 2, full deregulation of
16 Roundup Ready sugar beets.

17 Thank you.

18 MR. GEORGE: Thank you, Doug Etten. Sorry
19 about your name.

20 I got it right this time, did I?

21 MR. ETTEN: Thank you.

22 MR. GEORGE: David Roche.

23 MR. ROCHE: Good afternoon.

24 My name is David Roche, R-o-c-h-e.

25 I am the president and chief executive

1 officer of Minn-Dak Farmers Cooperative, located in
2 Wahpeton, North Dakota.

3 Our cooperative is owned by approximately 500
4 local shareholders who are all active in the growing of
5 sugar beets on their farms and rented acreage.

6 Our co-op, in 2011, contracted with
7 shareholders to plant, manage, harvest and deliver
8 about 120,000 acres of sugar beets.

9 In our most recently completed fiscal year,
10 revenue generated from the 2010 crop exceeded \$345
11 million, representing the sales proceeds from the more
12 than 722 million pounds of sugar and co-products
13 produced from the crop.

14 For the past four years, virtually all of our
15 contracted acreage has been grown to Roundup Ready
16 sugar beets, including the 2011 crop year, which was
17 grown in accordance with regulations as required under
18 the partial deregulation of Roundup Ready sugar beet
19 seed.

20 The benefits of Roundup Ready sugar beet seed
21 to farmers have been well documented in prior comments
22 submitted in regard to the environmental assessment and
23 partial deregulation of Roundup Ready sugar beet seed.

24 I would like to comment on the importance of
25 Roundup Ready sugar beet seed to our cooperatives'

1 shareholders from both the perspective of farm
2 management and with regard to the impact on our sugar
3 beet processing cooperative.

4 Some of the benefits -- excuse me -- to the
5 sugar beet processing cooperatives, like ours, are
6 listed below.

7 With superior weed control, due to the use of
8 Roundup Ready sugar beet seed, our farmers have
9 experienced both increased yields and reduced operating
10 costs on their farms.

11 The Roundup Ready sugar beet seed weed
12 control regimen is much less complex to manage, this
13 allowed for reduced use of other sugar -- herbicides.

14 During the 2011 crop year, most of our
15 growing areas were impacted by excessive rainfall, as
16 you've heard mentioned this afternoon.

17 Without the use of Roundup Ready sugar beet
18 seed, it's estimated we would have lost approximately
19 20,000 acres of growing crop due to saturated fields
20 being overtaken by weeds and made to be unharvestable.

21 Since these 20,000 acres of rain-damaged
22 sugar beets, which came from Roundup seed, were able to
23 be harvested, our cooperative had 150,000 tons of
24 additional sugar beets to process, than would have been
25 otherwise possible.

1 Although the yield, in terms of tons of sugar
2 beets per acre, was low, those beets are very valuable
3 to our cooperative in terms of more fully utilizing our
4 processing capacity.

5 In addition, had those 20,000 acres been
6 abandoned, and not harvested, in the absence of Roundup
7 seed, they would have lar -- they would have likely
8 generated more than \$7 million crop insurance claim, or
9 claims.

10 Instead, those beets are being processed and
11 it's estimated they will generate approximately \$9.7
12 million in revenue for our farmer/shareholders.

13 Minn-Dak Farmers Cooperative recommends to
14 our shareholder/growers that this type of technology be
15 respected in the highest regard and, therefore, be
16 preserved for generations to come.

17 Our cooperative has taken a very proactive
18 approach to the issue of weed resistance associated
19 with the use of the Roundup Ready system, not only in
20 sugar beets, but in the rotational crops as well.

21 Minn-Dak has and continues to convey this
22 important message to all of our shareholder/growers
23 through newsletters, meetings, grower-directed contact
24 with our ag staff.

25 If our farmer/shareholders were to lose the

1 ability to utilize Roundup Ready sugar beet seed, our
2 cooperative would likely experience a significant
3 decline in the volume of sugar beets to process.

4 With the added costs, complexity and risk
5 associated with conventional seed, many shareholders
6 would likely plant at only minimum levels or sell their
7 stock in the cooperative.

8 With su -- with reduced interest in sugar
9 beet production, more sellers of cooperative stock than
10 buyers, the value of cooperative stock would likely
11 diminish significantly.

12 Minn-Dak Farmers Cooperative certainly
13 appreciates the hard work by the Department in the
14 preparation of the Draft Environmental Impact
15 Statement. We strongly support Alternative 2, which is
16 full deregulation of Roundup Ready sugar beets.

17 Thank you.

18 MR. GEORGE: Thank you.

19 Next is Matt Hasbargen.

20 Matt?

21 He's not here?

22 MR. ROCHE: Matt is one of our growers, and
23 he was anticipating being a little bit delayed, if he
24 could save his place for a little later, that would be
25 appreciated.

1 MR. GEORGE: No problem.

2 MR. ROCHE: Thank you.

3 MR. GEORGE: In that case, we'll go to
4 Jeffrey Mortenson, please.

5 MR. MORTENSON: My name is Jeff Mortenson.
6 J-e-f-f M-o-r-t-e-n-s-o-n.

7 I'm a farmer from Kennedy, Minnesota. I
8 currently raise wheat, soybeans and sugar beets.

9 I've grown sugar beets with my brother for 14
10 years for the American Crystal Sugar Company.

11 My family has raised sugar beets since 1965
12 for American Crystal Sugar Company.

13 We currently grow about 650 acres of sugar
14 beets each year.

15 The first two years available to us, we
16 planted roughly 25 percent of our acreage to Roundup
17 Ready sugar beets. Then the following years, we went
18 to a hundred percent Roundup Ready sugar beets on our,
19 on our crop.

20 I am very appreciative of the work that APHIS
21 did, which allowed us to grow the Roundup Ready sugar
22 beets this past growing season.

23 But with all due respect, I feel that those
24 rules are really unnecessary. I am here to offer my
25 full support for full deregulation of Roundup Ready

1 sugar beets.

2 The use of Roundup Ready technology has had
3 many benefits.

4 With conventional beets, we used to spray
5 anywhere from four to five, and sometimes six times a
6 year for weed control, with the combination of six to
7 seven different types of chemicals in each pass.

8 With Roundup, we are using roughly three less
9 sprays to control weeds. And so just with that, the
10 water we are saving on our farm is roughly 20,000
11 gallons of less water being used with less
12 applications.

13 Also, that means less diesel fuel being used
14 and less exhaust emitted into the air, which is also
15 good for the environment.

16 I feel there should be no concern in growing
17 Roundup Ready sugar beets in the Red River Valley.
18 There's no risk of cross-pollination. We are already
19 required to remove the bolters with our Monsanto
20 technology agreements. And also beets in our area do
21 not over winter survive with the freezing temperatures.

22 So, again, I feel that there's no reason for
23 anyone to be concerned with the farmers growing Roundup
24 Ready sugar beets.

25 I would like to thank you for the opportunity

1 to offer my support, again, for full deregulation of
2 the Roundup Ready sugar beets.

3 MR. GEORGE: Thank you very much.

4 Scott Krogstad.

5 MR. KROGSTAD: My name is Scott Krogstad. S-
6 c-o-t-t K-r-o-g-s-t-a-d.

7 I'm a farmer from Thompson, North Dakota, in,
8 which is in Grand Forks. And we also farm in Traill
9 County, in eastern North Dakota.

10 I represent our family farm. We grow about
11 1400 acres of sugar beets, along with corn, soybeans
12 and edible beans and wheat.

13 On our farm, we switched to Roundup Ready.
14 We were, we were 50 percent Roundup Ready in 2008 and
15 have been a hundred percent since then.

16 And I'd just like to make a couple comments
17 that maybe haven't been addressed totally.

18 I agree with everything else that's been
19 said.

20 On our soil, we have some fairly light soil
21 and the -- being able to go without cultivation has
22 really reduced our soil erosion and obviously fuel,
23 fuel consumption.

24 The Jeff before me did mention about less
25 water use. Using Roundup, we only use 5 gallons of

1 water per acre, where before, we were using 20 gallons
2 of water per acre on each spray, so that -- do the
3 math, that's, that's a lot of water that we're not
4 using and that's beneficial to the environment.

5 And I would also like to mention the, the
6 chemical use. In the, the subsequent year following
7 Roundup beets, we use a lot less chemical on whatever
8 crop we're, we're spraying because the fields are that
9 much cleaner. So I think that's a very positive impact
10 to the environment, reduction of -- in chemical use.

11 Representing our farm, we definitely want to
12 support the full deregulation of, of Roundup Ready
13 sugar beets.

14 Thank you.

15 MR. GEORGE: Thank you.

16 Daniel Olson.

17 MR. OLSON: Daniel Olson. D-a-n-i-e-l O-l-s-
18 o-n.

19 First grade was the tougher years of my life.

20 And I farm, I farm in Reynolds, North Dakota,
21 and raise sugar beets for American Crystal. I grow
22 about 400 acres of sugar beets. Since the deregulation
23 of Roundup sugar beets, I have steadily increased my
24 acres in Roundup Ready sugar beets. I planted a
25 hundred percent Roundup Ready for the first time last

1 year.

2 The biggest benefit I saw was the convenience
3 of spraying later for the first shot of Glyphosate. I
4 typically would spray three times in the conventional
5 system before I would spray once in the Roundup Ready
6 system.

7 I was able to focus on planting my other
8 crops on a timely basis, rather than spend time
9 spraying the sugar beets, the conventional sugar beets.

10 That is very important, because sometimes we
11 have only a short window to work in to plant the other
12 crops.

13 Early planting is very important in our area
14 for crops like wheat and corn.

15 The other major benefit of Roundup Ready
16 beets is that the next year, the fields have less
17 weeds, so I am reducing my chemical usage on the other
18 crops.

19 And I thank you for all your hard work your
20 agency has done to ensure that we can utilize this
21 valuable tool.

22 I support full deregulation of Roundup Ready
23 sugar beets and appreciate all your work you have done
24 on behalf of the Environmental Impact Statement.

25 There have been no problems with Roundup

1 Ready beets on my farm since I started planting them in
2 2008. We've never had a problem with conventional
3 beets as a weed, so I don't know why we would have a
4 problem with Roundup Ready beets as a weed. The
5 chemicals we use in our rotational crops take care of
6 them.

7 The loss of this technology would be a step
8 back for production for sugar beets and for the other
9 crops.

10 There's supposed to be 9 billion people on
11 this planet by 2050. How will we feed all those people
12 if our technology is limited?

13 MR. GEORGE: Thank you.

14 Craig Steiger.

15 MR. STEIGER: Craig Steiger. C-r-a-i-g S-t-e-
16 i-g-e-r.

17 Thank you for the opportunity to speak to you
18 today.

19 I farm near Cavalier, North Dakota, located
20 in the northeast corner of the state. I'm the fourth
21 generation to operate this farm.

22 I currently farm with my father and I've been
23 engaged in the oper -- I've been engaged in the
24 operation since 1991.

25 We raise sugar beets on our farm as co-op

1 members of American Crystal Sugar Company. We also
2 raise spring wheat, dry edible beans, soybeans and
3 sunflowers.

4 Our farm typically raises 700 acres of sugar
5 beets each year. We have planted a hundred percent
6 Roundup Ready sugar beets since 2008, when they were
7 first approved.

8 We currently grow Roundup sugar beets,
9 Roundup Ready sugar beets under the current compliance
10 agreement between APHIS and American Crystal Sugar
11 Company.

12 I am here today to speak in support of full
13 deregulation of Roundup Ready sugar beets.

14 I can certainly respect the time and effort
15 that has already been put forth in the Draft
16 Environmental Impact Statement prepared by APHIS.

17 I would like to speak a little today on how
18 the use of technology of Roundup Ready sugar beets
19 benefits my farm and the co-op that I am a member of.

20 Prior to raising Roundup Ready sugar beets,
21 weed control was the biggest challenge we had in
22 raising our crop of sugar beets.

23 Using conventional sugar beet -- herbicides
24 on our sugar beet crop was labor-intensive and costly.
25 The selection of herb -- herbicides for use in growth

1 of sugar beets was limited and the herbicides were not
2 always effective. Because of that, limited
3 effectiveness, timing of application was important.

4 During peak weed control times, our farm had
5 labor that was dedicated to nothing but herbicide
6 application on sugar beets.

7 That cost of labor could be doing other
8 things on a diversified farm.

9 We sometimes found ourselves pushing the
10 envelope, envelope on proper application. Sometimes
11 applications were made at very odd times of the day to
12 increase effectiveness.

13 Rates were cut to avoid damage to beets and
14 the number of applications were increased. Four
15 applications per season on our farm was common.

16 And because of the limitations with these
17 herbicides, tank mixes of several different herbicides
18 were often used, creating a mixture that could
19 sometimes cause problems in the sprayer as well as
20 cause crop damage and increased chance of exposure to
21 workers.

22 The limitations of these herbicides often
23 created the need to hire hand labor to remove weed
24 escapes from sugar beet fields. Good hand labor was
25 becoming increasingly, increasingly expensive and hard

1 to find.

2 Hand weeding, in the last several years,
3 prior to Roundup Ready sugar beet, was often abandoned
4 and many farms suffered economic loss on their crop to
5 avoid the expense and hassle of finding good labor.
6 This resulted in not only a loss to, to farms, but
7 economic loss to our, our co-op.

8 Having Roundup Ready sugar beets available on
9 our farm is all about us becoming more productive and
10 more efficient and being better stewards of our land
11 and employees.

12 Timing of the application is not nearly as
13 big an issue. Application happens in a manner that is
14 much friendlier to the environment because we can
15 afford to wait out rain and wind events.

16 Tank mixing of herbicides has been
17 eliminated, creating fewer chances of exposure to
18 workers.

19 Application of Roundup is most often only two
20 applications per season on our farm, resulting in near
21 perfect weed control, with no damage to the sugar beet
22 crop.

23 Eliminating weed competition increases
24 yields. Eliminating two trips across the field with
25 sprayers reduces cost by saving time and fuel.

1 We have not used hand labor in sugar beet
2 fields on our farm since the introduction of Roundup
3 Ready sugar beets, reducing chance of exposure of
4 pesticide residue to workers.

5 And researchers confirm that Glyphosate is
6 much safer to people and the environment than
7 herbicides we previously had available.

8 Roundup Ready sugar beets has had a very
9 significant, positive impact on my farm and for
10 American Crystal Sugar Company. Overall, overall yield
11 and quality have improved considerably since the
12 introduction of this technology.

13 We have always strived for excellent weed
14 control, but now we are able to do it efficiently and
15 have excellent results.

16 Yields have increased enough that we can
17 raise more sugar on fewer acres, allowing us to use
18 some of those acres to di -- diversify into other
19 crops, increasing productivity on our farm.

20 Our farm, as well as many others in this
21 region, strives to imple -- implement new technology
22 that has been proven to give us a return on investment.

23 Roundup Ready sugar beets has been one tool
24 available to us that's given us more than a financial
25 return, it has given us very reliable weed control,

1 crop safety, employee safety and environmental --
2 environmentally safer alternative form of herbicide
3 than was previously available.

4 Our farm certainly looks forward to the
5 future of many similar advances that Roundup Ready
6 sugar beets has given to us.

7 Thank you for taking the time to consider and
8 evaluate this tool for sugar beet growers in this
9 region and, and across the country.

10 Thank you for allowing me to share my
11 thoughts today.

12 MR. GEORGE: Thank you.

13 Marc Stevens, please?

14 MR. STEVENS: I already spoke.

15 MR. GEORGE: Sorry?

16 Marc Stevens?

17 MS. STANKIEWICZ GABEL: He already --

18 MR. GEORGE: Steven --

19 MS. STANKIEWICZ GABEL: -- spoke.

20 MR. GEORGE: Uhm?

21 MS. STANKIEWICZ GABEL: He already spoke.

22 MR. GEORGE: Oh, forgot to tell me.

23 There's a question mark, Steve Fritz?

24 No. Okay, decided not to.

25 Mark Herickhoff.

1 MR. HERICKHOFF: Good evening.

2 I'm -- my name is Mark Herickhoff, spelled:
3 H-e-r-i-c-k-h-o-f-f.

4 And I'm from Belgrade, Minnesota. We grow for
5 Southern Minnesota Sugar at Renville.

6 And I've farmed for approximately 40 years.
7 And I've grown sugar beets for about 12 years. And I
8 don't have a title.

9 But I'd like to give you the Paul Harvey part
10 of this story, okay.

11 I have, I've, I've sprayed ditches for our
12 local Watershed District for a number of years. And I
13 needed to have a -- special endorsements to do that.
14 So we -- I had to go to these classes, okay, to get
15 this commercial applicator's license.

16 And I was over at Detroit Lakes, Minnesota,
17 here, three years ago, to get this endorsement.

18 And, of course, the classes are all day. And
19 they're put on in January. And, and the -- a couple
20 people that were putting this on, had on the screen,
21 they had a list of the chemicals that they had found in
22 the Mississippi River.

23 And there were about four to five different
24 chemical families, okay.

25 Some of them were -- like Atrazine was at the

1 top, I recall that. Velossa was in there, and a few of
2 the, the common ones that we all, that we all can
3 relate to.

4 And I'm sitting there and I'm saying: holy
5 cow, doesn't anybody -- isn't anybody going to ask
6 about Roundup, you know? Haven't, haven't they found
7 Roundup?

8 And nobody did, you know.

9 So I finally raised my hand and I said:
10 where's Roundup?

11 You know, Roundup's been out for about 20
12 years, maybe 15, okay.

13 And the guy said: well, he said, we can't
14 find it.

15 And I says: what are you talking about?

16 It's been out for 15 years and you haven't
17 been able to detect Roundup?

18 No, he said, we, we have no technology that
19 can detect Roundup.

20 I didn't pursue it. I would like to have
21 said a lot more. But, you've got to remember, the
22 regulators are sitting in the back of the room, so if
23 they get your number, you know, they may be calling on
24 you.

25 But, anyway, I think the bottom line of this

1 whole thing is that this technology's so good, that we
2 got the biggest river in the Mississippi, in the
3 Mississippi, in North America, and the powers that be
4 can't find the, the chemical.

5 That's how good it is.

6 And then we've got people who want to
7 eliminate it for us. Is somebody -- you know, when we
8 first grew sugar beets for the first seven, eight
9 years, there were times, honestly, that I mixed up the
10 seven chemicals at one time to mix a load of, of
11 herbicides. And I know all these farmers know that in
12 this room.

13 And then we're trying to eliminate the best
14 chemical that we've ever had. And we can't find it.

15 I think that we need to think about some of
16 that.

17 You know, we increase our yields about 10 to
18 20 percent with Roundup in our operation.

19 And we ex -- we import about 25 percent of
20 the sugar currently. Do we want to -- what are we
21 going to do, do we want to import more sugar, do we
22 want to go to 35 or 40 percent? If we go to
23 conventional.

24 And then what's going to happen with our
25 rivers, our streams.

1 So I think we need to think about that.

2 I think the bolter thing is a joke, total
3 joke. On our 1500 acres of beets, we didn't have any
4 reports from our staff or people that -- so -- I don't
5 know what others have found.

6 But to me it's just a joke. There's no other
7 way to say it, it's, it's wasting your time and our
8 money.

9 And so, with that, I guess I support full
10 dereg -- deregulation and -- of the Roundup Ready sugar
11 beet.

12 MR. GEORGE: Thank you very much.

13 MR. HERICKHOFF: Thank you.

14 MR. GEORGE: David Berg.

15 MR. BERG: I already had my turn, thank you.

16 MR. GEORGE: Mohamed Khan.

17 Thank you.

18 MR. KHAN: Good after -- good afternoon and,
19 thank you, Mr. Chairman.

20 My name is Mohamed Khan. M-o-h-a-m-e-d K-h-a-
21 n.

22 And I'm the extension sugar beet specialist
23 for North Dakota State University and the University of
24 Minnesota.

25 I have conducted educational programs and

1 research in sugar beet for the past 13 years and I have
2 the research data for the past 41 years.

3 I concur with other, with the, what the other
4 speakers have presented.

5 I will just give you a few highlights of some
6 additional issues.

7 Weeds, as we have heard, were considered as
8 the worst production problem for many years. Poor weed
9 control not only resulted in reduced yield from
10 competition, but very importantly, delays harvesting
11 operations, which can be costly to farmers, especially
12 if there's an early freeze or heavy rainfall. Just ask
13 my friends from Minn-Dak.

14 Most growers use two applications of
15 Glyphosate and have reported excellent weed control.

16 I have personally conducted several tests
17 which show that Glyphosate can be safely mixed with
18 most of the insecticides and fungicides used in sugar
19 beet without causing phytotoxicity.

20 Growers wisely use mixtures when possible to
21 reduce the number of passes over a field, to reduce
22 fossil fuel and, most importantly, to reduce their cost
23 of production.

24 Based on the crops produced here in North
25 Dakota and Minnesota, there is no issue of cross-

1 pollination, since sugar beet and none of its relatives
2 are grown for seeds in these states.

3 Over the past four years, sugar cooperatives
4 have successfully used Roundup Ready sugar beet to
5 produce a safe, affordable and reliable source of sugar
6 that is accepted by consumers, many of whom are our
7 sugar beet growers.

8 Weed control was the most important problem
9 for sugar beet growers since beets were first grown in
10 Europe, and later, in the United States.

11 An annual sugar beet survey started in the
12 1970s, conducted for North Dakota and Minnesota, showed
13 that weeds were considered as the most important
14 problem from the '70s until 2008.

15 In 2009 and 2010, weed control was not
16 considered as a great of problem. Instead, Rhizoctonia
17 and Aphanomyces root rot were considered as the major
18 problem.

19 Should USDA/APHIS decide on Alternative 1,
20 growers will have to contend with managing weeds using
21 conventional herbicides, which are not as effective as
22 Glyphosate. They'll have to use tillage to assist with
23 weed control, which will probably lead to more
24 Rhizoctonia crown rot, which happens when you have soil
25 intrusion into the crown of plants.

1 And in addition, the sugar beet industry will
2 not have the opportunity to utilize genetic engineering
3 to help manage disease -- diseases such as Rhizoctonia
4 and Aphanomyces root rot.

5 Very importantly, timely application of
6 fungicides, such a Quadris, which is used to control
7 Rhizoctonia root rot, will be hindered. Why, this
8 fungicide cannot be safely mixed with conventional
9 herbicides, since it must be applied three or more days
10 prior to or after conventional herbicide application.

11 Mr. Chairman, scientific evidence have not
12 indicated any major, negative consequences of planting
13 and using Roundup Ready sugar beets and commercial
14 production to date has been shown to be very safe.

15 I have read your sev -- 729 pages, Draft
16 Environmental Impact Statement, October, 2011, for
17 Glyphosate tolerant H7-1 sugar beets, request for
18 nonregulated status, which addressed the environmental
19 consequences of using Roundup Ready sugar beet and of
20 alternatives.

21 I agree with your assessment. As such, I
22 strongly im -- implore you to choose Alternative 1
23 (sic) and grant full deregulation of H7-1 Roundup Ready
24 sugar beet.

25 Thank you.

1 MR. GEORGE: Thank you.

2 Matthew Hasbargen, please.

3 MR. HASBARGEN: My name is Matthew Hasbargen.

4 M-a-t-t-h-e-w H-a-s-b-a-r-g-e-n.

5 I'm a third-generation sugar beet farmer from
6 Breckenridge, Minnesota. My family has grown sugar
7 beets since the 1960s. And I've been, been raising my
8 own sugar beets for the last 20 years for the Minn-Dak
9 Farmers Cooperative in Wahpeton, North Dakota.

10 This past year, I raised about 1800 acres of
11 sugar beets. I also raised corn, soybeans and wheat.

12 I embrace the introduction of Roundup Ready
13 sugar beets in 2008 by planting 900 acres, which was
14 the most that our co-op would allow. And then 2009
15 through 2010, growing the maximum amount, a hundred
16 percent of my crop.

17 I currently am growing Roundup Ready sugar
18 beets under compliance agreements between APHIS and the
19 Minn-Dak Farmers Cooperative.

20 I really appreciate the hard work reflected
21 in the Draft Environmental Impact Statement prepared by
22 APHIS. I support the proposed Alternative 2, full
23 deregulation of Roundup Ready sugar beets.

24 The reason why I understand it -- or why I
25 promote it, is if you go back 20 years ago to the way

1 we started to farm with nonRoundup Ready sugar beets,
2 or as we called them, conventional sugar beets, and
3 that is due to weed control in those beets.

4 The key to growing a good sugar beet crop is
5 good weed control.

6 We used to use band sprayers, broadcast
7 sprayers, cultivators and also hand labor to get this
8 accomplished.

9 We'd start in April, after the beets would
10 plant -- were planted, by doing a soil-side -- soil-
11 applied herb -- fungicide. And then once the beets came
12 out of the ground, we'd band spray up to seven
13 different chemicals, three to five times during that
14 growing season.

15 The mixture and handling of the seven
16 different chemicals was com -- was a complex process,
17 requiring strict management oversight.

18 Once all the chemicals were mixed in the tank
19 and ready to go, I had only a few hours to get those
20 sprayed off before the mixture started to precipitate
21 in the tank.

22 Ideally, I could apply the chemical by
23 ground, but if it was a wet spring, I would have to
24 hire an airplane to apply the chemical. This was very
25 costly and tricky endeavor, since the mixture of

1 chemicals could kill pretty much any of the other crops
2 surrounding the field.

3 Appli -- after application, you could tell
4 that the conventional herbicide damaged the beets
5 slightly. It would take awhile for the beets to grow
6 out of the chemical shock.

7 Because I was only controlling the weeds in
8 an 11-inch band over the top of the beets, I would also
9 have to use a cultivator to control the weeds in
10 between the row.

11 We traditionally would cultivate three to
12 four times per year. Even with perfect chemical
13 application timing, it's virtually impossible to
14 control all of, all of the weeds in a conventional
15 sugar beet field, thus, hand labor was required every
16 year to clean up the fields. This was very hard work.

17 Overall, we make between 10 to 12 passes with
18 a piece of equipment to control weeds in a conventional
19 sugar beet field.

20 Now with the Roundup Ready system, it's
21 greatly streamlined our weed control processes. The
22 only tool we use is a broadcast sprayer. We simply
23 make two to three passes over the field, spraying
24 Roundup to control the weeds.

25 I no longer have to mix individual chemicals

1 and dump them into the sprayer tank. Roundup comes in a
2 250-gallon bulk system, so I can stand by the chemical
3 truck and just turn valves to fill the sprayer.

4 Additionally, there is no need for
5 cultivation or hand labor. This saves me time, money
6 and most, importantly, exposure to harmful chemicals.

7 The 10 to 12 passes has now been reduced down
8 to two to three.

9 Good stewardship is an essential part of
10 farming. The partial deregulation and compliance
11 agreements have worked in conjunction with my farming
12 practices.

13 For example, I've always tried to vary my
14 crop rotation to keep weed, weed pressure low and
15 reduce the resistance of weeds to chemicals. I follow,
16 I follow chemical labels to make sure I use the
17 appropriate rate of chemicals to control weeds.

18 I also identify and remove all bolters in my
19 sugar beet fields.

20 The loss of the Roundup Ready sugar beet
21 technology would be a great loss for my farm and the
22 environment. The impacts are great due to the increase
23 in number of trips across the field to control the
24 weeds in a conventional sugar beet crop. The fuel
25 savings alone are staggering, staggering. With the

1 Roundup Ready technology, I'm going to save over a
2 tanker lab -- load of fuel every season.

3 Thank you.

4 MR. GEORGE: Thank you.

5 The last name I have is David Roche, but you
6 already spoke. Am I right?

7 MR. ROCHE: Yes.

8 MR. GEORGE: The next name I -- I have to
9 confess, I can't make this name out.

10 It's a person that's with ACSC, from Warren,
11 Minnesota.

12 MR. DVORAK: Dvorak?

13 MR. GEORGE: It starts with a T, that's about
14 the only letter I can --

15 MR. DVORAK: That'd be me.

16 MR. GEORGE: Okay. You must be a doctor.

17 MR. DVORAK: Hello. My name is Todd Dvorak.
18 T-o-d-d D-v-o-r-a-k.

19 I'm a farmer from Warren, Minnesota, I farm
20 with my dad, Ted, and brother, Eric.

21 I'm a fourth-generation sugar beet grower and
22 have been growing beets for American Crystal since
23 2004. Our operation typically grows 400 acres each
24 year.

25 Our farm has seen a great benefit to growing

1 Roundup Ready sugar beets. The excellent weed control,
2 followed by the wider application window, allows us to
3 grow higher-yielding sugar beets, while maintaining a
4 clean field.

5 Roundup Ready sugar beets have also reduced
6 the chemicals we have needed to use and handle for weed
7 control. Using one product versus three to four in
8 combination have simplified our weed control program,
9 along with fewer passes across the field and less
10 exposure to chemicals.

11 In closing, I appreciate the work done by
12 APHIS in the Draft of the Environmental Impact
13 Statement and I support Alternative 2 and full
14 deregulation of Roundup Ready sugar beets.

15 Thank you.

16 MR. GEORGE: Thank you.

17 Eric Erdman.

18 MR. ERDMAN: Hi. Eric Erdman. E-r-i-c E-r-d-
19 m-a-n.

20 I farm in Polk County, northwestern
21 Minnesota, growing sugar beets for American Crystal.

22 My family's been farming sugar beets for
23 three generations. And we currently farm about 1500
24 acres, consisting of wheat, soybeans and sugar beets.

25 We have utilized the Roundup Ready technology

1 in the past, but did not use Roundup Ready sugar beets
2 last year, due to the uncertainty of the seed.

3 We needed to select specialized varieties due
4 to disease pressures in our soils. And planting
5 varieties that were not compatible would have resulted
6 in very poor yield and possible abandonment of the
7 fields.

8 With that, I fully support the full
9 deregulation of Roundup Ready seed.

10 This year was a challenging one to be a sugar
11 beet farmer. A wet, cool spring delayed the planting.
12 And as soon as planting was completed, the weather
13 heated up and multiple storms rolled through.

14 Although we were extremely lucky and did not
15 receive an abundance of rain, like many others,
16 conventional beets offered many challenges that Roundup
17 would not have.

18 On one particular quarter, we made six trips
19 over the field with conventional herbicides and early-
20 season fungicide treatments. With Roundup, that would
21 have been easily cut in half, if not down to two trips.

22 Conventional loads many times have between
23 three and six different chemicals being tank mixed,
24 whereas, Roundup would cut that down to one or two.

25 That is a lot more chemical being applied per

1 time, allowing for a lot more opportunity for errors,
2 so --

3 Roundup allows the ability to mix in certain
4 fungicides with the herbicide, where some conventional
5 chemicals do not, due to the volatility of it.

6 The timing of the applications with chemical,
7 conventional chemicals, is also much more critical.
8 Through this growing season, like may years before, we
9 were forced to spray when conditions were not ideal.
10 We had to spray when the temperature was warmer and,
11 therefore, we'd notice some damage due to the herbicide
12 that's there.

13 Along with less chemical, Roundup has allowed
14 us the opportunity not to cultivate.

15 The combination of less spraying, with less
16 cultivation, uses less fuel and less trips across the
17 field, resulting in a lot less wheel tracks and compac
18 -- compaction, also, which improves yields.

19 Roundup has been very dependable on our farm.
20 And it has allowed us better control over some weeds,
21 primarily kochia and wild oats, where we've experienced
22 problems and conventional -- with conventional
23 chemicals.

24 Being st -- good stewards of land has always
25 been a priority on the, our farm. With all chemicals,

1 we strictly follow the rule and guideline set forth by
2 the EPA.

3 And with Roundup, we've worked closely with
4 APH -- American Crystal, APHIS and Monsanto to ensure
5 this technology will be here for us to use in the
6 future.

7 Thank you.

8 MR. GEORGE: Thank you.

9 Tim Osowski.

10 MR. OSOWSKI: Tim Osowski. O-s-o-w-s-k-i.

11 Hello. I farm near Argyle, Minnesota, with
12 my brother, father, uncle and two cousins.

13 Along with sugar beets, we plant wheat,
14 soybeans, corn and edible beans.

15 I have grown sugar beets for American Crystal
16 since 2001, and we now raise about 2,000 acres.

17 I am a member of the Minnesota Association of
18 Wheat Growers and serve on their state board. And also
19 on my local township board.

20 In 2008, we planted about half of our sugar
21 beet acres to Roundup Ready, which was reduced because
22 of availability of seed. And since then, we have
23 planted all of our sugar beet acres to Roundup Ready.

24 The major reason we have used the Roundup
25 Ready technology is the superior weed control over

1 herbicides and methods used on now nonRoundup Ready
2 beets.

3 Before utilizing Roundup Ready sugar beets,
4 we would apply three to six applications of four or
5 five herbicides, along with two cultivations. And
6 sometimes hand labor was also necessary, which is
7 difficult to find and very expensive.

8 Additional difficulty in using hand labor was
9 the, the more toxic herbicides used. And nonRoundup
10 sugar beets required the workers to be out of the
11 fields longer after applications of such herbicides.

12 Even with multiple trips across the field,
13 which requires more fuel to be used, we often had less
14 than desirable weed control, which resulted in lower
15 crop yields and often harvest difficulties.

16 The use of Roundup has enabled us to have
17 excellent weed control and application timing
18 flexibility, while only applying the herbicide two
19 times.

20 We have always used -- utilized crop
21 rotations to improve the quality and quantity of our
22 sugar beet crop. And we have continued to do so since
23 using the Roundup Ready technology.

24 The use of crop rotations allows us to use
25 different mode-of-action chemicals that will reduce the

1 possibility of resistant weeds on our fields.

2 We also use tillage before and after all
3 crops that we grow to reduce weed pressure.

4 The Technology Use Agreement with Monsanto
5 requires applications of Glyphosate in accordance with
6 the label. And I do so to further prevent the
7 possibility of resistant weeds.

8 The training and practices required by the
9 compliance agreement did not change the way I farm,
10 because we had already implemented those practices.

11 We have removed rare bolters during field
12 inspections. We rotate for the improvement of all
13 crops that we raise. And we train our employees to
14 handle seed and chemical with care in accordance with
15 the labels.

16 My employees and I take training on chemical
17 application through the Minnesota Department of
18 Agriculture and we had trainings, training on use of
19 Roundup Ready technology specific to sugar beets prior
20 to planting. We are educated and continually informed
21 of changes on the use of Roundup Ready technology.

22 I would like to extend an appreciation to
23 members of APHIS for work done on the Draft
24 Environmental Impact Statement and to support proposal
25 Alternative 2, full deregulation of Roundup Ready sugar

1 beets, which will allow for long-term planting for me
2 and the seed companies I purchase seed from.

3 In production agriculture in the Red River
4 Valley, weather is our largest variable in growing a
5 crop, and the use of this technology enables us to
6 reduce the risk from weather events and consistently
7 produce a crop for our cooperative and consumers.

8 Thank you.

9 MR. GEORGE: Thank you.

10 Trent Eidem.

11 MR. EIDEM: Hi, my name's Trent, T-r-e-n-t,
12 Eidem, E-i-d-e-m.

13 Again, that's E, as in the excitement on my
14 son's face because I'm home with him rather running the
15 sprayer through the field again; I, as in increased
16 production; D, as in deregulation of Roundup Ready
17 sugar beets; E, as in excellent weed control; and M, as
18 in more, more crops to mirror the increased production
19 -- or increased demand.

20 First off, let me thank you and everyone here
21 with APHIS and APHIS as a whole for all the work
22 they've done in preparing the Draft EIS.

23 That being said, again, my name is Trent
24 Eidem. I farm northeast of Moorhead, Minnesota. I
25 farm with my father, who took over the farm from my

1 grandfather.

2 I've been farming for eight years, all of
3 which I've grown sugar beets for American Crystal Sugar
4 Company. But my dad's been growing sugar beets for
5 American Crystal Sugar Company for 34 years.

6 Together, we farm just shy of 600 acres of
7 sugar beets each year.

8 In the past three years, we've planted 100
9 percent of our sugar beet acres to Roundup Ready sugar
10 beets.

11 Our 2011 Roundup Ready sugar beet crop was
12 planted under compliance agreements between APHIS and
13 American Crystal Sugar Company, under the grower unit
14 name Terry Eidem.

15 Although we currently grow wheat and
16 soybeans, in addition to sugar beets, we view our
17 operation, first and foremost, as a sugar beet farm.
18 And that's a source of pride for me, as well as my
19 entire family.

20 That pride has led me to become even more
21 involved in the sugar beet industry. I currently sell
22 sugar beet seed for Seedex, Incorporated, as well as I
23 serve on the Red River Valley Sugar Beet Growers
24 Association and Bateman's research and education board.

25 But mostly that pride requires me to be a

1 great steward of the land. Stewardship has always and
2 will always be a vital part of our operation.

3 Because of that, along with the stewardship
4 practices required by my Technology Use Agreement with
5 Monsanto, the partial deregulation and compliance
6 agreement did not cause me to make any substantial
7 changes to my growing practices in 2011.

8 We understand the value of crop rotation,
9 using the proper herbicide rates in our field, bolter
10 removal and weed resistance training. And there --
11 therefore, they have been and will continue to be a
12 part of our operation going forward.

13 This is one of the many reasons why I support
14 Alternative 2, the full deregulation for Roundup Ready
15 sugar beets.

16 Roundup Ready sugar beets offer several
17 advantages to conventional sugar beets for our
18 operation.

19 Roundup Ready sugar beets offer a far more
20 effective weed control alternative to the microrate
21 programs of the past.

22 Instead of making four to five applications
23 with a cocktail of several chemicals, Roundup Ready
24 sugar beets allow us to make one -- make two to three
25 applications with significantly fewer chemicals to mix.

1 The microrates cause injury to the beets.
2 They also -- they're also more toxic and have a much
3 more window of application than Roundup.

4 So Roundup Ready sugar beets allow for safer,
5 more effective weed control, with the added bonus of
6 fewer passes over the field, minimizing fuel used and
7 emissions.

8 With weed control being one of the most
9 difficult challenges we face, that is invaluable.

10 The issue of cross-contamination is not an
11 issue at all in the Red River Valley. First of all,
12 chard and table beets are not grown in this area,
13 making cross-contamination impossible.

14 Secondly, we harvest our sugar beets after
15 one year, whereas, sugar beets do not flower until the
16 second year. With the few exceptions to that rule,
17 first-year bolters are removed and destroyed.

18 Secondly, we harvest -- or I'm sorry, I'm --
19 If, if a beet should escape the lifter, we --
20 it stands little chance against the often harsh winters
21 we experience here in the Red River Valley.

22 Roun -- Roundup Ready sugar beets are
23 important to this area, they're important to me and
24 they're important to my family.

25 So, again, I will reiterate my full support

1 of Alternative No. 2, the full deregulation of Roundup
2 Ready sugar beets. And I urge APHIS to take the steps
3 necessary to move to full deregulation of Roundup Ready
4 sugar beets.

5 As the third generation on my family farm,
6 one of the biggest goals in my life is to continue to
7 grow the farm so that it not only continues to be a
8 viable lifestyle option for my son, but that it
9 continues to be a source of pride for my entire family.

10 I fully believe that Roundup Ready sugar
11 beets will be an integral part of that process.

12 Thank you for your time.

13 MR. GEORGE: Thank you.

14 Dane Braun.

15 MR. BRAUN: Hello, I'm Dane Braun. D-a-n-e B-
16 r-a-u-n.

17 I'm, I'm the program and policy analyst for
18 the North Dakota Department of Agriculture. I grew up
19 on a farm in Trentwood County, Minnesota, a sugar beet
20 farm.

21 Unfortunately, I left before Roundup Ready
22 sugar beets came around, so I was one of the unlucky to
23 go weed the fields.

24 A couple comments on behalf of the
25 Agriculture Commissioner, Doug Goehring. D-o-u-g G-o-e-

1 h-r-i-n-g.

2 The sugar beet industry is very important to
3 our state and to the region. North Dakota's the number-
4 two producing state only behind our neighbors to the
5 east, Minnesota. We have sugar beets on both the east
6 and west side of, of the state.

7 Roundup Ready technology gives producers
8 greater control over weed management, while decreasing
9 the environmental impact, with fewer pesticide
10 applications and less disturbance of the soil.

11 Roundup Ready technology gives our producers
12 another tool in the toolbox for weed control.

13 The Agriculture Commissioner is in full
14 support of Roundup -- of deregulation of Roundup Ready
15 sugar beets.

16 Our farmers are great stewards of the land
17 and will continue that stewardship in the future.

18 I thank APHIS for your work and for this
19 meeting.

20 MR. GEORGE: Thank you.

21 Jeff Stachler.

22 MR. STACHLER: Good evening. My name is Jeff
23 Stachler. J-e-f-f S-t-a-c-h-l-e-r.

24 Good evening. Sugar beet growers should have
25 the opportunity to choose the type of weed control

1 practices that best fit their operation.

2 Roundup Ready sugar beets have provided the
3 most effective weed control in the history of sugar
4 beet production in Minnesota and North Dakota, based on
5 our annual survey of Minnesota and North Dakota sugar
6 beet growers.

7 According to this survey, Roundup Ready sugar
8 beet has reduced the number of weed control passes
9 across the field compared to conventional sugar beets.

10 As with any technology, there are risks
11 involved with planting Roundup Ready sugar beet,
12 however, these risks are limited and manageable by
13 growers and the industry.

14 Therefore, I support Alternative 2, full
15 deregulation of Roundup Ready sugar beet as proposed by
16 the Draft Roundup Ready Sugar Beet Environmental Impact
17 Statement.

18 And I thank APHIS for their diligent work in
19 preparing this Draft Environmental Impact Statement.

20 Thank you very much.

21 MR. GEORGE: I have a couple here with an,
22 with an X in the column, I'm not sure if this is
23 indicating that you want to speak or not.

24 One is Beau Bateman, who I believe spoke
25 already. Am I right?

1 MR. BATEMAN: Correct.

2 MR. GEORGE: Okay.

3 Same thing with Doug Etten. Etten.

4 MR. ETTEN: Yes, sir.

5 MR. GEORGE: Okay. I'm slow, but trainable.

6 Troy, Troy Newhouse.

7 MR. NEWHOUSE: Hello. My name is Troy

8 Newhouse, from Fisher, Minnesota, be speaking on behalf
9 of our farm.

10 My father had a few words to, to say, so he
11 asked me if I would read them. He could not make it
12 today or this evening. And after that, I will kind of
13 give my own opinion of how I feel, so --

14 COURT REPORTER: Can you please state your
15 name --

16 MR. NEWHOUSE: Yeah, --

17 COURT REPORTER: -- or spell --

18 MR. NEWHOUSE: -- I'm sorry.

19 COURT REPORTER: -- it.

20 MR. NEWHOUSE: Troy Newhouse. T-r-o-y N-e-w-
21 h-o-u-s-e.

22 COURT REPORTER: Thank you.

23 MR. NEWHOUSE: Now this is from my father.

24 I have farmed in Fisher, Minnesota, for 36
25 years. I raise sugar beets for the American Crystal

1 Cooperative. Approximately 30 percent of my acreage is
2 dedicated to sugar production. Other crops are edible
3 beans, soybeans, wheat and occasionally corn.

4 I have planted Roundup sugar beets for the
5 past two years exclusively. I can say without a doubt
6 that Roundup sugar beets make all our other crops
7 better.

8 We have and will follow all the rules
9 implemented to make the technology available.

10 Saying this, we fully support the
11 deregulation of Roundup Ready sugar beets and we do
12 appreciate the hard work of the APHIS group in drafting
13 the Environmental Impact Statement.

14 Roundup is a new technology that not only
15 makes our lives better, but also allows American sugar
16 producers to be more competitive in a world market.

17 Roundup technology not only impacts the
18 competitiveness of sugar production, but other crops as
19 well, edible bean -- edible beans in particular.

20 Weed control in any row crop is a major
21 challenge. In years past, weed control required timely
22 passes of complex chemical strategies that had varying
23 results.

24 Many times the applications were ineffective,
25 forcing us to find hand labor that is almost

1 nonexistent with today's environment.

2 Roundup technology also impacts the next
3 year's crop with lower weed pressures. Planting Roundup
4 Ready sugar beet is a very expensive process, but
5 significantly cheaper and more effective than
6 alternatives.

7 In the years past, we would mix four to five
8 and even more chemicals in a tanks -- tank mix because
9 of toxically -- because of that toxicity, the tank mix
10 could damage the beet crop.

11 In my farming career, I have reluctantly
12 implemented many new technologies.

13 I can second that.

14 Roundup Ready crops, specifically Roundup
15 Ready sugar beets, were the easiest to accept and has
16 had the largest impact on the quality of my life.

17 Sugar production is a complex business that
18 is com -- that is completed by hardy individuals,
19 however, the legacy that aging farmers should leave the
20 next, should not include a key reversal of new
21 technology that makes the quality of life better.

22 I've farmed with my father for six years now.
23 And we -- when sug -- Roundup Ready beets came
24 available in 2008, we didn't go full on board, we were
25 about 20 percent. And then exclusively, like he said,

1 in 2009 and 2010 and 2011.

2 It's improved our quality of life so much.
3 You know, with myself, being married, with a young
4 family, just that opportunity to get home at night is,
5 is a very invaluable asset that I feel is, is worth
6 every penny to raise sugar beets in, in the Roundup
7 version.

8 Extremely thankful for the partial
9 deregulation for the past year. It would have put us
10 in a very big pinch for this upcom -- this past growing
11 season, had we not had Roundup seed, because there was
12 a, a shortage of conventional varieties that are
13 effective with the disease packages that we desire.

14 So thank you. And, and we completely agree
15 with the, the, the full deregulation of, of -- in the
16 Alternative 2 measure.

17 So thank you for your time.

18 MR. GEORGE: Thank you.

19 Erik Bakke.

20 MR. BAKKE: My name is Erik Bakke. E-r-i-k B-
21 a-k-k-e.

22 And I farm in the Ulen, Minnesota area, and
23 have been growing sugar beets in the Moorhead district
24 of American Crystal Sugar Company since 2004, growing
25 approximately 700 acres annually.

1 Other crops in my rotation include wheat,
2 corn and soybeans. Roundup Ready sugar beets have been
3 a hundred percent of my operation since 2009.

4 I currently grow Roundup Ready sugar beets
5 under compliance agreements between American Crystal
6 Sugar Company and APHIS.

7 I recognize and appreciate the hard work
8 brought forth in the Draft of the Environmental Impact
9 Statement prepared by APHIS. And I fully support the
10 proposed Alternative 2, the full deregulation of
11 Roundup Ready sugar beets.

12 There are many benefits to growing Roundup
13 Ready sugar beets. The most of which is superior weed
14 control compared to conventional spraying methods.

15 The ability to control weeds with Roundup
16 allows produce -- producers to be much more flexible
17 with the timing of application, widening the window for
18 effective weed control.

19 I believe that Roundup Ready technology is
20 also better for our environment than conventional
21 planting, as it reduces the number of chemicals used,
22 as well as the amount of chemical that needs to be
23 handled by any one person.

24 With two or three applications of Roundup,
25 compared to four or five or more applications of

1 conventional chemicals, we are able to reduce tillage
2 practices, spray applications and hand labor, saving
3 money on reduced inputs, all while generating better
4 yields.

5 The compliance agreement we are currently
6 under did not greatly change the way I farm because
7 many of the key requirements were already being
8 implemented in my operation, such as identification and
9 removal of bolters, weed resistance management, crop
10 rotation and application of herbicides at labeled
11 rates.

12 These were already required in the Technology
13 Use Agreements signed with Monsanto upon planting their
14 genetics.

15 In my growing region, I believe there is no
16 risk of cross-pollination from Roundup Ready sugar
17 beets.

18 First-year beets do not flower and in the ev
19 -- and in the event of a rare first-year bolter, they
20 are being removed and destroyed. If a beet were left
21 in the ground, it would not survive our tough Minnesota
22 winters.

23 In addition, table and chard beets are not
24 grown in my region, eliminating cross-pollination
25 worries.

1 If I were to lose Roundup Ready sugar beets
2 in my operation, it would be a step backwards I
3 believe, resulting in reduced acres because of extra
4 workload, increased input costs due to more chemical,
5 machinery and labor needed. And last, but not least,
6 more than likely a drop in yields, reducing
7 profitability.

8 Thank you for your time and listening to my
9 comments.

10 MR. GEORGE: Thank you.

11 I have Matt Hasbargen on here again, but I
12 believe you already spoke. Am I right, yep?

13 MR. HASBARGEN: Correct.

14 MR. GEORGE: Nathaniel Hultgren.

15 MR. HULTGREN: I'm Nathaniel

16 Hultgren. That's: N-a-t-h-a-n-i-e-l.

17 Hultgren is: H-u-l-t-g-r-e-n.

18 I'm a third-generation beet farmer with
19 Southern Minnesota Beet Sugar Co-op. A fourth-
20 generation farmer from Raymond, Minnesota.

21 I currently farm with my brother and father
22 and all of our families depend on our operation for our
23 livelihood.

24 I feel that the issue we have before us today
25 is one of sound science, human progress and sustainable

1 competitiveness in the global marketplace.

2 When viewed in the context of these three
3 elements, there's nothing but support from our family
4 for the full approval of full nonregulated status for
5 genetically-engineered sugar beets.

6 First of all, sound science.

7 As a sugar producer, my biggest concern is
8 the safety and satisfaction of our food customers, here
9 and around the world.

10 Studies have shown that there's no detectable
11 difference between sugar produced from conventional
12 sugar beets and sugar produced from genetically-
13 engineered sugar beets.

14 As farmers, we know that the pollen-
15 contamination cannot realistically be a concern, since
16 the sugar beets we raise for sugar production are not
17 alive long enough to produce any seed. And bolters are
18 dealt with in, in the event of any rare growth in the
19 first year.

20 While opponents of the Roundup Ready
21 technology may cite an increase in chemical use, we, as
22 sugar beet growers, know that is quite the opposite.

23 With conventional sugar beets, we were forced
24 to use three to four applications within two weeks of
25 each other, with often more toxic chemicals that were

1 much less effective on the weeds.

2 These chemicals would often stunt sugar beet
3 growth, were far more detrimental to neighboring crops
4 if misapplied and usually required soil-applied
5 residual chemicals for optimal control.

6 Glyphosate is strictly an over-the-top
7 program with fewer applications, spaced farther apart,
8 with much more effective control, all while posing less
9 risk for neighboring crops, the soil and the sugar
10 product.

11 My second point is human progress.

12 Technological advancements have been used to
13 improve quality of life in healthcare, manufacturing,
14 energy production and education. Why should
15 agriculture be any different?

16 Biotechnology has been a huge advantage in
17 crop production thus far and the possibilities are
18 endless.

19 Glyphosate resistance is only the beginning.
20 Plants can be bred to be resistant to disease or to
21 produce certain enzymes for particular dietetic or
22 industrial needs.

23 Insect damage can be suppressed through the
24 use of biotechnology. When so many people on our
25 planet are starving and land use is becoming more of an

1 issue, is this a good time to take away these
2 progressive tools that allow us to produce more food on
3 less acres with less resources per acre?

4 My third point is global competitiveness.

5 What is the economic impact of 5 tons less
6 sugar beets per acre? Where in the world will sugar
7 production migrate to if disease forces certain areas
8 of the United States to cease sugar beet production?

9 If sugar beet growers and processors are not
10 allowed to utilize biotechnology to impro -- improve
11 their food product, defend against disease and increase
12 production efficiency, more and more factories and
13 family farms will discontinue sugar beet production.

14 Jobs will be lost, small-town businesses will
15 close. And, once again, regulation will cause the
16 movement of a successful industry overseas.

17 One must understand that the playing field in
18 agriculture is on a mountain with a much steeper slope
19 than there was ten years ago.

20 If producers must go back to conventional
21 beets, raising only 21 tons per acre, instead of 25,
22 for instance, the high cost of other inputs, such as
23 land rent and fertilizer, will not make that possible.

24 Farmers will not raise beets, factories will
25 close, people will lose their jobs and America will be

1 forced to import sugar, sugar that is of a lower
2 quality than our current high-quality American product.

3 The cost of a pound of sugar in the United
4 States would skyrocket and consumers would feel, feel
5 the pain when they can't afford their favorite grocery
6 items.

7 In closing, I want to thank APHIS for
8 allowing us to comment tonight on this subject. And I
9 hope American farmers are allowed to utilize all the
10 advancements that are available to them.

11 Together, with highly-reputable companies
12 that produce these technologies, and with the sound
13 management practices that we as American farmers are
14 known for, I'm confident that my family will be able to
15 continue to produce sugar for consumers in the United
16 States and across the world for generations to come.

17 Thank you.

18 MR. GEORGE: Thank you.

19 Is there anyone else who would care to speak
20 who has not yet spoken or perhaps I may have missed
21 somebody on this list?

22 Is there anyone else who would like to speak
23 today?

24 Okay.

25 In that case, I think what we'll do is not

1 adjourn, but rather su -- kind of suspend the meeting.

2 We will stay here until 7:00 o'clock, so if
3 there are latecomers who come in, who would like to
4 make public comments, we'll be happy to take them.

5 I will remind you that it is also possible to
6 make public comments on the web. You can go to our
7 website, there's a link to regulations dot gov, where,
8 where you can also leave comments.

9 If you have comments that you would care to
10 leave in writing, even if you did not speak, you can
11 leave those in the public comment box that's in the
12 back of the room.

13 I'd like to thank everyone for coming out
14 today to share your comments with us. It's an
15 important part of our process. We welcome your input
16 and thank you for taking the trouble to be here today.

17 So with that, we're not going to adjourn, but
18 we will suspend here for a while.

19 Thank you.

20 (Whereupon, the proceedings were
21 suspended at 5:55 o'clock p.m.)

22 (Whereupon, the proceedings were
23 adjourned at 7:05 o'clock p.m.)

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REPORTER'S CERTIFICATE

I, Joy Filipski, a general shorthand (Stenograph) reporter, do hereby certify that the foregoing pages of typewritten material constitutes a full, true and correct transcript of my original Stenograph notes, as they purport to contain, of the transcript of the proceedings reported by me at the time and place hereinbefore mentioned.

Joy Filipski

Capital Reporting Company
 Roundup Ready Sugar Beet Environmental Impact Statement 11-15-2011

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