

DOCKETED

Docket Number:	08-AFC-08A
Project Title:	Hydrogen Energy Center Application for Certification Amendment
TN #:	202842
Document Title:	Letter requesting CEC action to respect mitigation requests to minimize local threats
Description:	N/A
Filer:	Tiffani Winter
Organization:	HECA Neighbors
Submitter Role:	Intervenor
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There is a "divergence" between California's CEQA guidelines and the federal government's NEPA. It makes the public feel California is challenged to evaluate without influence the environmental impacts of HECA under CEQA. Examples: CEQA looks at alternate SITES and FUELS... FUELS like biomass (locally available), or natural gas with carbon sequestration (which would generate more MW of power to the grid than coal). However, Federal Govt takes the \$408 million grant away if HECA doesn't use coal, or if the SITE is changed after Sept 2010.

But, it is not the same project as in 2010. SCS Energy didn't own HECA until a year later, 2011. Then SCS changed it into a chemical factory adding more dangers, and SCS changed the primary feed stock ... it's fuel. The original 2008 application used pet coke as the primary feedstock, a by-product of local oil refining, and coal as a secondary feed stock not to exceed 60%. SCS changed it to 75% coal for the life of the project and pet coke 25%. We question how the CEC can do a proper environmental study with the Federal Gov't stating they will withdraw funds if not within the Gov'ts limited scope.

We don't have local control in Kern, but Kern has the local risks. We need the CEC to respect out mitigation requests to minimize the local threats. Please:

1. Evaluate alternative SITES not on Prime Farm Land, suggested by the Kern County Board of Supervisors. (site could be up to 200 miles away) and alternative FUELS (Natural Gas and bio fuels) that would be environmentally more prudent for Kern.
2. Require HECA to fund a local air monitor as requests by two school districts. It should be tied to the San Joaquin Valley Air Pollution Control District's real time advisory and among other things report for ozone and particulate matter. (Tupman, being the closest school, would like it placed near their school). With the public's investment of \$408 million in a project that will further degrade the air in the most polluted air in the nation it seems fair to spend some of the public's donation and give the local folks the tools to alert us so we can better protect our students and ourselves.
3. Also note the traffic concerns of the local school districts. What happened to British Petroleum's truck route using Hwy 46 to I-5? At the very least trucks should be limited during school bus hours. CEC needs to work with the school districts as HECA has turned a blind eye to the school's requests.
4. Include the Kern County Farm Bureau's request for a bond for any potential damage to farms, crops, or land.
5. Demand dry cooling. It should be unthinkable to allow pumping of 6.6 million gal/ day of useable ground water for industrial purposes.

6. Full disclosure to the public the dangers from HECA's chemicals. Locally we understand risks from a small quantity of anhydrous ammonia. It is mind boggling that a an accidental release study of an entire tank of anhydrous ammonia (almost 2,000,000 gallons) is hidden under confidential cover. Study the worst impact possible and report how far danger extends from an accidental release. Tupman? Taft? Bakersfield? Tell us!!!

7.4/ You must take the environmental justice issues seriously in Wasco. CEC must consider the cumulative impacts to the labor camp folks next door to Savage Coal. Wasco allowed the expansion of Savage Coal without performing an EIR, contrary to their original CUP. Reject Wasco's actions and demand an EIR from Savage Coal.

Respectfully,

HECA Neighbors
Chris Romanini

Kern County

2. Mitigation for Loss of Agricultural Lands. The PCDD notes that the project will result in the loss of more than 400-acres of Prime agricultural land. The applicant's presentation that the loss of more than 400-acres of Prime farmland is "not significant" and therefore requires no mitigation is incorrect. All Kern County projects, for which an EIR is prepared, requires that the loss of prime, unique or farmland of statewide importance be mitigated at a ratio of 1:1, as required by CEQA. Such mitigation involves the acquisition of agricultural easements on similar quality land and Staff is recommending that the replacement easements be located in Kern County. Even with this mitigation, Staff notes the determination regarding the significance of the loss of prime farmland is based on the findings of the Kern County General Plan EIR and other County-prepared EIRs in the valley; and that the loss of 400+ acres of Prime farmland is both project and cumulatively significant.
- a. *Therefore, the PCDD recommends that the project, if approved by the CEC, include appropriate Mitigation Measures for loss of prime agricultural land at a 1 to 1 ratio as required by CEQA, and with mitigation lands to occur within Kern County.*

~~b. *The Kern County Board of Supervisors also notes that the CEC's CEQA Evaluation should review alternative sites for the project that do not contain Prime Agricultural Farmland.*~~

Additionally, the PCDD notes that, in response to the Kern County Farm Bureau's presentation at the February 26, 2013 Board hearing, the Board of Supervisors directed inclusion of the Farm Bureau's concerns within this comment letter. Therefore, a letter dated February 26, 2013 from the Kern County Farm Bureau representative is attached for your consideration.

3. Impacts to County Services (Sales Tax). If approved by the CEC, the HECA Project would be sited and will operate within Kern County. The impacts of the project will affect Kern County property owners, residents, and County services. To address such impacts, the Kern County Board of Supervisors requires that renewable energy projects, specifically wind and solar PV, identify their place of origin as an address within an unincorporated area Kern County and register that address with the State Board of Equalization; such that the purchase of project equipment and other materials which generate sales tax payments will benefit Kern County residents. Staff notes that the HECA applicant has an office located in Buttonwillow (an unincorporated area of Kern) and that this sales-tax mitigation measure has been implemented for over 15 other projects with no objection from those applicants; including international and out-of-state companies. Therefore, there should be no objection from the applicant to inclusion of this measure on the HECA Project, and the applicant expressed no objection at the hearing before the Board of Supervisors.

Therefore, the recommended mitigation measure is as follows:

Prior to the issuance of building permits for the HECA project, the Project Proponent/Operator shall comply with the following: The Project Proponent shall work with the appropriate Kern County Staff to determine how the receipt of sales and use taxes related to the construction of the project will be maximized. This process shall include, but is not necessarily limited to: the Project Proponent/Operator obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, registering this address with the State Board of Equalization, using this address for acquisition, purchasing and billing purposes associated with the proposed project. The Project Proponent/Operator shall allow the County to use this sales tax information publicly for reporting purposes.

4. Transparency of CEQA Analysis (Air Quality Emissions Data). According to a CEC letter dated January 23, 2013 (TN #69231), HECA filed an application to the CEC in January, 2013 requesting confidentiality for the calculations and formulas used to calculate HECA's potential air emissions of criteria pollutants, greenhouse gases and toxic air contaminants. The application states that the formulas and calculations are confidential as a "trade secret" that provides a business advantage

① alternative sites

HECA's water consumption. For a further discussion of the Dry Cooling or Wet-Dry Hybrid Cooling Alternative, please refer to the **Water Supply** section within this PSA/DEIS (Section 4.15). DOE believes that is a project-level alternative that merits further analysis and consideration.

NATURAL GAS COMBINED CYCLE WITH CARBON CAPTURE AND STORAGE (CCS)

As described in the subsection "Alternatives Eliminated From Detailed Consideration," staff has eliminated the Natural Gas Project Alternative which consists of a conventional natural gas-fired electric generation facility that would generate electricity but would not include CO₂ capture or storage, EOR at the Elk Hills Oil Field, or production of any fertilizer or other nitrogen-based products.

To conduct a thorough and robust alternatives analysis, staff is considering an alternative that would consist of a natural gas combined cycle electrical generation facility capable of carbon capture and storage (CCS) for EOR at the Elk Hills Oil Field. This alternative includes the possible development of a new natural gas combined cycle facility (either at the HECA site or another site). Engineering staff considers that CCS coupled with natural gas power plants should be evaluated, especially when looking to the future as easily dispatchable natural gas capacity is expected to be used to back up intermittent renewable energy sources, not base-loaded coal facilities. Additionally, many depleted oil fields that are the targets of CCS deposits and EOR are within California.

Staff acknowledges that many HECA project objectives are linked to coal/petcoke gasification for electrical production, CCS, and production of fertilizer and other nitrogen-based products. Staff also acknowledges the issue of losing project funding resulting from implementation of a natural gas combined cycle with CCS Alternative versus the HECA project is an important consideration, as it would eliminate coal-fueled electricity production (a requirement for DOE funding and section 48a tax credits) from the project while still demonstrating CCS and EOR at the EHOFF. Additionally, to separate carbon dioxide from the other constituents inherent in natural gas combustion versus combustion of hydrogen derived from gasification of coal/petcoke, this alternative may require different above-ground components than those associated with the HECA project. For example, a steam reformer may be needed to produce hydrogen-rich fuel in place of the coal/pet coke gasification system, if the objective is to capture carbon before combustion and/or to incorporate fertilizer production into the project. The cost of the natural gas system should be compared to the cost of the coal/pet coke system (including gasifier, air separation unit, coal/pet coke delivery and storage onsite) and the difference in cost should be compared to the DOE funding and section 48a tax credits that would be lost. Furthermore, the differential cost between coal/pet coke and natural gas would need to be included for a more complete cost comparison. Finally, at the quantity of carbon dioxide proposed by HECA to be sequestered, a natural gas system with CCS is likely to be able to generate more new incremental MW capacity than HECA's net incremental MW capacity that would be added to the grid. This result is expected because natural gas has approximately half the carbon per BTU than does coal.

① CEC alternative fuel

As this alternative would not require the transport and use of coal and petcoke feed stocks, as well as transport of nitrogen based products, the environmental benefits of this alternative would be to lessen or avoid adverse impacts (Air Quality, Transportation/Traffic, Biological Resources) associated with these HECA project features. Please refer to all relevant environmental issue area analyses (refer to Section 4 of this PSA/DEIS).

This alternative is not a reasonable one for DOE's purpose and need. DOE's authority to provide financial assistance is limited to projects that use coal. This is an example of a situation in which there is a divergence of alternatives under CEQA and NEPA.

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BIOMASS BOILER ALTERNATIVE

Staff is considering an alternative that would consist of a biomass-fired boiler that would provide the same net new electrical capacity and energy as HECA. This alternative may not provide carbon capture and storage, but would provide a new, local renewable energy facility with essentially a zero-carbon footprint, depending on how far the biomass would have to be transported to the facility site. There is at least one existing biomass-fired boiler in Kern County, which recently converted from coal. The availability of biomass to fuel a new boiler in southern San Joaquin Valley has yet to be evaluated. It should also be noted that this alternative was requested by Sierra Club, as identified in the subsection "Public and Agency Participation."

This alternative is not a reasonable one for DOE's purpose and need. DOE's authority to provide financial assistance is limited to projects that use coal. This is an example of a situation in which there is a divergence of alternatives under CEQA and NEPA.

ADDITIONAL ALTERNATIVE SITES

Alternative sites evaluated in the subsection "Alternatives Eliminated From Detailed Consideration" focused on locations proximate to the EHO. Public comments provided at the San Joaquin Valley Air Pollution Control District (SJVAPCD) Preliminary Determination of Compliance public workshop on April 2, 2013 for the HECA project included a request that Energy Commission staff evaluate alternative sites for the HECA project located up to 200 miles from the proposed site, with the project including an expansive CO₂ pipeline to the EHO for EOR. Due to the timing of this comment and the size and scale of this request, staff was unable to consider this alternative prior to publication of this PSA/DEIS. Staff's preliminary review has shown power plant facilities within the United States successfully demonstrating CCS with CO₂ pipelines over 200 miles long providing EOR. For example, the Great Plains Synfuels Plant near Beulah, North Dakota transports CO₂ via a 205-mile pipeline to an oil field near Weyburn, Saskatchewan, Canada for EOR. This alternative will be considered within the FSA/FEIS.

This alternative is not a reasonable one for DOE's purpose and need. DOE's authority to provide financial assistance using monies appropriated by the Recovery Act prohibits changes in the project's scope (including significant location changes) after September 20, 2010. Also, the applicant has invested significant financial resources in obtaining the

①

CEC

& alternative fuel site

option to purchase the site, and would be unable or unwilling to move the project at this late date. This is another example of a situation in which there is a divergence of alternatives under CEQA and NEPA.

COAL TRANSFER ROUTE ALTERNATIVES

The HECA project includes both rail and truck options for coal delivery from the rail transfer point. These options are analyzed in the **Traffic and Transportation and Land Use** sections of this PSA/DEIS. With respect to alternative rail and truck routes, each proposed route option was selected to utilize existing rail and roadways, minimize travel distance, and minimize any potential ground disturbance activities. As discussed in the **Biological Resources** section of this PSA/DEIS, the proposed project would result in potentially significant impacts to San Joaquin kit fox as a result of fox being run over by trucks. At present, an adequate mitigation proposal has not been received. At this time, creation of new coal transport rights-of-way or longer travel distances for coal via rail or truck are not known to lessen or avoid any impacts associated with the coal transport options being evaluated. Alternatives staff will continue to coordinate with Biological Resources staff to determine if alternative truck routes may be developed for the FSA/FEIS. At this time, therefore, alternative coal transport routes were not developed by staff and may be evaluated or eliminated from consideration in the FSA/FEIS. DOE believes that is a project-level alternative that merits further analysis and consideration.

ALTERNATIVES EVALUATED IN DETAIL

An analysis comparing the environmental effects of HECA to each of the project alternatives warranting detailed evaluation is provided below. The project action alternatives evaluated in detail meet the alternatives screening requirements discussed earlier in the subsection "CEQA Requirements." **Alternatives Table 7** provides a summary of each alternative's ability to fulfill project objectives.

Following an overview of each alternative, an environmental analysis by resource area is provided for each alternative. The analysis is focused on the ability of the alternative to avoid or lessen any significant project impacts (as identified within **Alternatives Table 1**). **Alternatives Appendix 1** contains a list of staff contributors to the environmental analysis of alternatives evaluated in detail.

C&C

Tupman School - Elk Hills

Subject:

FW: concerns - HECA - Elk Hills School District Docket request

From: Jeff Tensley [mailto:jetensley@elkhills.org]

Sent: Tuesday, August 27, 2013 9:52 AM

To: Heiser, John@Energy; Energy - Docket Optical System

Subject: concerns

Elk Hills School would like several safety precautions for the HECA trucking and from the project site itself.

HECA should adjust their trucking schedule when there are foggy day school delays. If HECA refuses we will ask that no trucks travel roads in the school district boundaries at any time when visibility during the daytime is less than 300 ft as determined by the school or the Highway Patrol.

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> The route for waste trucks must be specified along with all other potential trucking routes.

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> Elk Hills School requests that HECA be required to pay for an official California Air Resources Board Monitor or Local Air District ozone and particulate monitor near the school so that accurate information about air pollution levels locally is available and so we can keep kids indoors when conditions dictate. The monitor should be hooked into the Real Time Air Quality Advisory Network that the air district maintains for other areas. Right now they have to rely on information from Bakersfield monitors which do not reflect local conditions. HECA may claim to have mitigated their air pollution on a valley wide basis but the local effect from all their emissions will make the Tupman air potentially worse than with the current situation.

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> An emergency siren, like those near the nuclear power plant in San Luis Obispos, should be located near the school in the event of a large ammonia, CO₂ or other toxic release occurring at the HECA site or on surrounding roads. This event could be from leaks, fires, explosions, or traffic accidents. The siren would tell teachers and children to immediately seek shelter in-doors.

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Jeff Tensley
Superintendent
Elk Hills School District
P.O. Box 129
Tupman, Ca 93276
661-765-7431 work
661-747-1839 cell
jetensley@elkhills.org

2 Air monitors
Tupman

From: Ernie Unruh [mailto:erunruh@zeus.kern.org]
Sent: Thursday, August 29, 2013 3:45 PM
To: Heiser, John@Energy
Cc: 'Tony'; spackard@buttonwillowschool.com
Subject: HECA 08AFC8A

Rio Bravo - Greeley School

Dear Mr. Heiser;

On 8/13/2013 I sent an email to your attention in which I made known a request and some concerns about the HECA project referenced below. I also asked that you acknowledge receipt of my correspondence. To this date I have not received a reply. For this reason I email again. Please note that there are additional concerns which have come to my attention since our last correspondence.

I am requesting that the Rio Bravo Greeley School District be added to any and all correspondence as it relates to HECA 08 AFC 8A. I also ask that you Docket this letter.

This project has a direct impact on our School District. As you may or may not be aware we have two schools that sit on State Highway 43. We also have bus stops on this major transportation artery as well as on Highway 58 and Stockdale Highway.

In the mornings we have school busses and many parents that utilize State Highway 43 for ingress and egress into our schools. The number of trucks utilizing this route for the aforementioned project will have a major impact and could quite possibly put our students, parents and teachers in a less than safe situation.

Traffic lights at the intersection of Kratzmeyer and State Highway 43 as well as turning lanes may not be enough to minimize a potentially dangerous situation for our constituents.

I highly recommend that an alternate route which would minimize the exposure of our students be considered. Our elected Board of Trustees are very concerned and may well choose to go on record opposing this project. We will be present to express our concerns at the next public meeting in regards to this project.

X I am also concerned about the air quality and the monitoring of air in our area. It would alleviate some concern if we had a way of knowing if excessive ammonia, CO2, or any other hazardous condition were to exist.

If you have any questions or if you would like to discuss this further please contact my office at the numbers below. Our concern is the safety of our 1000 + students and their families.

Sincerely,

Ernie D. Unruh
Superintendent/Rio Bravo-Greeley Union School District
661-589-2696 Office
661-331-0330 Cell

② air monitor
Schools

Energy - Docket Optical System

From: Stuart Packard [SPackard@buttonwillowschool.com]
Sent: Tuesday, September 10, 2013 10:42 AM
To: Heiser, John@Energy; Energy - Docket Optical System
Subject: HECA 08 AFC 8A

Mr. Heiser,

During the past few months it has become apparent that the HECA project in Kern County has been a lightning rod for both opponents and proponents. As the Superintendent of Buttonwillow Union School District I am in a position that is focused on the safety of our students. There are a myriad of reasons for our district to have questions about the project and its impact on our community and most importantly the children.

Among these concerns and their impact on our school we are chiefly concerned about the number of trucks that may well utilize Highway 58 running east and west, and the use of Buttonwillow Drive that runs north south. Our school is bordered on two of our four sides by this state highway and local road. Highway 58 is already a main thoroughfare for other industries and is heavily traveled. We have already been working with the California Highway Patrol and local politicians to resolve some of the problems created by the design and location of this two lane highway that runs through our town. We are also concerned that Buttonwillow Drive, which is a local road that travels north south and sees over 60% of the student population crossing this road, may well become an outlet for the trucks associated with this project. For these two reasons alone it is a safety concern.

Our busses begin to roll as early as 6:45 and return as late as 3:30. This makes transportation a very large concern as well. Our busses have had to wait up to 6 minutes at times to cross Highway 58, where additional trucks during these times may well make it more unsafe as well as more difficult to cross the highway.

Additionally, beyond the transportation issues, the air quality in our area is among some of the worst in the valley. With these concerns we would like to see efforts made that will eliminate some of the concerns in this area. This could be done by providing monitoring stations in Buttonwillow that would give an accurate measurement of any harmful particulates that may potentially impact our students.

Because of these major concerns I am requesting that we be added to the mailing list for all correspondences related to this project. Additionally, I would like to request that this email be added to the docket that relates to the project.

Your assistance in this area will be helpful to our school board as everyone moves forward in the process of potentially bringing the HECA Project to a point of operation.

Please feel free to contact me with any further questions.

Sincerely,

J. Stuart Packard
Superintendent/Principal
Buttonwillow Union School District
42600 Highway 58
Buttonwillow, CA 93206
Phone: 661.764.5166
Fax: 661.764.5165
www.buttonwillowschool.com

KERN COUNTY FARM BUREAU

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1st Vice President

Catalino "Tito" Martinez
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Benjamin McFarland
Executive Director

February 4, 2014

Ms. Lisa DeCarlo
Staff Attorney
California Energy Commission
Delivered via email to lisa.decarlo@energy.ca.gov

RE: Follow up information to 11-20-13 Buttonwillow workshop on 08-AFC-8A

Dear Ms. DeCarlo:

I am writing to submit additional information per your request at the November 20, 2013 workshop in Buttonwillow, CA on the Hydrogen Energy California (HECA) project. Specifically in regards to the addition to HECA's Proposed Conditions of Certification of a bonding requirement.

As you recall, the Kern County Farm Bureau (KCFB) has requested in the attached letter, "that the project owner enter into a bonding agreement to set aside funds to mitigate any potential damages to neighboring agricultural production. Typically, bonding is required at 10% the total cost of the project." As a follow up to these verbally delivered remarks you had inquired into how such bonding is structured.

Pursuant to development standards in the State of California, a bond is required of the developer and held by the lead agency for all projects to secure funds in case of unforeseen and unmitigated impacts. Usually, for a set time period and defined scope.

In the case of HECA, the California Energy Commission (CEC) would hold the bond for the project applicant. The bond would seek to cover the cost to growers in a defined area that should experience any negative impacts to their agricultural production from HECA for a set amount of years after the CEC were to certify the project. The amount of the bond could be calculated by using UC Davis Tree and Vine Loss Calculators, a defined area of protection, and the amount of years to cover.

I hope this elaboration is helpful. Thank you for considering our concerns.

Sincerely,



3 Bond

rigorous consideration. For example, BVWSD's Final Environmental Impact Report (FEIR) describes that the second phase of their proposed Brackish Groundwater Remediation Program (BGRP) could provide up to 4,500 AF/y of brackish groundwater. The water source is shallow groundwater that is already problem water and impacting crop type and yield. Accordingly, this alternative source is worthy of consideration for at least some portion of industrial supply water for the HECA plant. In light of this potentially superior alternative, staff expects a more thorough analysis of its viability. Staff will prepare an independent analysis of the feasibility of using additional sources of water produced by the BGRP, in addition to the proposed supply.

The applicant has also neglected to adequately consider a dry-cooled project alternative. As stated in this analysis, in some cases the impact to water resources may be proportional to the volume pumped, and likewise, any decrease in water use could contribute to a lessening of the impact, proportional to the decrease. It is reasonable to consider dry cooling to reduce the potential project's water consumption, even if it would not reduce such consumption to zero. Dry cooling has the potential to: a) reduce project water demand to roughly 17-percent of the currently proposed amount, and thereby b) reduce water costs by approximately \$70,000,000 over a 25-year period.

Applicant responses to staff inquiries about dry cooling, including Data Response 203, January 2013, rely on references that don't reflect the current state of power plant development in California, and do not consider project and site specific conditions. Since the data responses have been inadequate for staff to complete an analysis of the feasibility of dry-cooling, staff will prepare an independent analysis for the Final Staff Assessment.

As discussed above, the project's current industrial supply well field could create three significant impacts.

1. The project's pumping could exacerbate overdraft in the Kern County Subbasin.
2. The project's pumping could potentially induce a significant proportion of degraded water to move into the local water-supply aquifer, further degrading local water supplies.
3. The project's pumping could also reverse local water level increases and increase the threat to the California Aqueduct from subsidence.

Staff has provided preliminary conditions of certification that can be used to mitigate potential impacts from basin overdraft, well interference, and subsidence. However, these conditions are only applicable if it can be shown through further analysis that potential groundwater quality impacts identified herein are not a concern. In addition, given staff's current conclusions, a more rigorous analysis of alternatives must be conducted to show there is no other economically feasible and environmentally desirable water supply available consistent with Energy Commission and other state water policy.

INTRODUCTION

This section of the Preliminary Staff Assessment (PSA) analyzes potential impacts to water resources from the construction and operation of the Hydrogen Energy California

Ⓐ No Water Dry Cool

anhydrous ammonia will not result in a significant risk to the off-site public.” As discussed above, this statement appears to be in conflict not only with modeling analyses but also with the actual historical release analysis provided on pages 4.5-14 through 4.5-20. In particular, staff cites the Terra International facility as being most similar to the proposed HECA Urea Ammonium Nitrate (UAN) production facility (p. 4.5-17). Here the document describes a significant ammonia release incident of December 13, 1994 that resulted in “plumes and clouds of ammonia as far away as 5 miles from the facility”. Table 2 also describes the presence of anhydrous ammonia as high vapor pressure; high volume; and high danger. Given this information, the other examples cited and in existence, and broader modeling consideration, the possibility of off-site impact should not be categorically discounted. This is true for ammonia and other of the hazardous materials and RMP regulated chemicals discussed in the PSA/DEIS.

While NEPA does not require the use of specific impact assessment methodologies, we note that this facility will be subject to the Risk Management Program. Thus, it would be appropriate to use RMP methodologies in the impact assessment. As presented in the document, the anhydrous ammonia alternative release scenario revealed in the modeling is intended to show examples of potential impacts for a typical failure mode, of which there can be many examples. However, RMP regulations also require subject facilities to model a worst-case release and potential offsite consequences based on the release of the largest single container (in the case of HECA ammonia storage 1,900,000 gallons). Ultimately, HECA will need to use the RMP* Comp or a similar type of modeling for compliance with the Risk Management Program requirements. For discussion and comparison purposes, EPA used the available information provided in the document to do preliminary RMP* Comp modeling for HECA based on the release of a single tank over a 10 minute period. With the simple inputs provided, as well as an administrative control value of 85% total volume (1,615,000 gallons out of a 1,900,000 gallons maximum capacity), the model estimated toxic endpoint distance between 13 and 25 miles. As the PSA/DEIS acknowledges, different model inputs and different modeling tools could produce different results. That said, the results produced here suggest that off-site impacts should be fully evaluated and communicated while acknowledging that the data will not address the likelihood that the releases or the impacts will occur. In many cases, particularly for the mandated worst-case release scenario, the likelihood may be very low.

The discussion of the risk that the facility poses should strive to convey meaningful information to the public. With that in mind, we note that the document indicates that figures showing how far the predicted ammonia concentrations would extend from the anhydrous ammonia tank under different accident release scenarios were provided as confidential information to staff. It is not clear why these figures cannot be disclosed to the public. As they are important components of the facility impact analysis, some means of illustration should be provided.

Appendix A of the Hazardous Materials Management chapter provides some useful information that the lead agencies should consider integrating into this impact assessment discussion. For example, it would be helpful for the public to understand the potential symptoms that could be experienced at different release concentrations of ammonia. Additionally, the footnote in Appendix A Table 1 states that the World Health Organization (WHO) warned that the young, elderly, asthmatics, those with bronchitis, and those who exercise should also be considered at increased risk based on their demonstrated greater susceptibility to other respiratory irritants. It does not appear that this increased risk was disclosed sufficiently in this section.

⑤ EPA