

Exhibit 2

**Comments on the Hess Newark Energy Center Application for Air Pollution
Operating Permit (Title V) and Federal Prevention of Significant Deterioration
(PSD) of Air Quality Permit and Acid Rain Permit**

**Program Interest (PI) Number: 08857
Permit Activity Number: BOP110001**

Submitted By:

New Jersey Environmental Justice Alliance

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Introduction

The New Jersey Environmental Justice Alliance (NJEJA),¹ the only statewide organization in New Jersey that focuses on environmental justice (EJ) issues, urges the New Jersey Department of Environmental Protection (NJDEP) to deny the air permit application from the Hess Newark Energy Center (Hess NEC) based on EJ, and other, concerns. These concerns are detailed below.

The EJ Context for the Proposed Power Plant

NJDEP is proposing to approve an air permit for a power plant that may emit over two million pounds² of toxic air pollution (excluding green house gases³) per year and will be sited in a city that is vastly a majority Of Color and in a neighborhood that is disproportionately poor. The city, of course, is Newark and the neighborhood is the Ironbound community in Newark.⁴ In addition, both Newark and the Ironbound

¹ The NJEJA mission statement reads as follows: “The New Jersey Environmental Justice Alliance is an alliance of New Jersey-based organizations and individuals working together to identify, prevent, and reduce and/or eliminate environmental injustices that exist in communities of color and low-income communities. NJEJA will support community efforts to remediate and rebuild impacted neighborhoods, using the community’s vision of improvement, through education, advocacy, the review and promulgation of public policies, training, and through organizing and technical assistance.”

² This number is derived by totaling the maximum amount of emissions for the following pollutants contained in the “Pollutant Emissions Summary” in Section C of the draft permit: VOC, NO_x, CO, SO₂, TSP, Other and HAPs. The exact total is 2,139,240 pounds of potential emissions per year. If the same exercise is performed for a similar table (Table 2 at page 5) in the NJDEP Fact Sheet for the proposed Hess NEC power plant (Program Interest Number 08857, Permit Activity Number BOP11000; hereinafter referred to as the NJDEP Fact Sheet) potential emissions total the smaller value of 1,773,980 pounds per year. The primary difference is that the “Other” category of pollutants contained in the draft permit summary table is not contained in the Fact Sheet table. The pollutant emissions totaled from the Fact Sheet were VOC, NO_x, CO, SO₂, PM₁₀ and sulfuric acid mist.

³ Table 2 of the NJDEP Fact Sheet at page 5 lists the maximum amount of potential greenhouse gas emissions from the Hess NEC power plant as 2,003,654 tons per year.

⁴ Table 4 of the NJDEP Fact Sheet at page 19 indicates that the City of Newark is 85.7% Of Color whereas the entire State of New Jersey is only 34.0% Of Color. The City of Newark is also disproportionately poor since according to the same Fact Sheet table, 28.5% of Newark residents live below the poverty line compared to 8.5% of New Jersey residents as a whole. The final report prepared by the Ironbound Community Corporation for its Community Action for a Renewed Environment (CARE) Project at page 1 states that: “Census tracts in our neighborhood range from 25%-50% of the population living below the

community have cumulative impacts problems since they are overburdened with pollution. Another troubling aspect of this scenario is that NJDEP has 2009 data that demonstrate that in New Jersey cumulative impacts, or the amount of pollution in neighborhoods, is correlated with race and income. The above-recited facts provide a very disturbing EJ context for the issuance of an air permit to the proposed Hess NEC power plant.

The NJDEP Fact Sheet that accompanies the proposed air permit states, “Newark is an area where the NJDEP has recognized there are disproportionate impacts from multiple sources of air pollution.”⁵ The Ironbound community within Newark is also widely recognized as suffering from a cumulative impacts problem. This is one reason why the Ironbound Community Corporation was granted a Community Action for a Renewed Environment (CARE) grant⁶ in 2009 by Region 2 of the U.S. Environmental Protection Agency (USEPA) to address cumulative impacts within the Ironbound neighborhood. The final report for the Ironbound Community Corporation CARE Cumulative Impacts Project describes some of the reasons the Ironbound community is considered to be overburdened with pollution in the following manner:

Within the Ironbound there are more than 100 brownfields and hazardous waste sites, including a Superfund site that contains the world’s largest concentration of dioxin. The Ironbound has an active and expanding industrial sector. The Ironbound is home to some of the largest regional facilities like the Passaic Valley Sewage Treatment Plant. The community’s zip code contains over 300 major air permits and over 700 air permits for small stationary sources. At least 90 of the 125 streets have emitting facilities and over 200 facilities store and use hazardous materials

poverty level.” “Our neighborhood” refers to the Ironbound community and these facts also make the Ironbound disproportionately poor. CARE is a grant program administered by the U.S. Environmental Protection Agency and the grant period was from October 5, 2009 until September 30, 2011. The report can be accessed at <https://sites.google.com/a/ironboundcc.org/ironboundcare/resource-center>.

⁵ NJDEP Fact Sheet at page 24.

⁶ A webpage for the Ironbound Community Corporation CARE Cumulative Impacts Project can be found at <https://sites.google.com/a/ironboundcc.org/ironboundcare/resource-center>.

on site. The state's largest solid waste incinerator is located in our community, burning close to 1 million tons of waste annually. There are approximately 10,000 truck trips daily emanating from Ports Newark and Elizabeth along with docked ships emitting bunker fuel and port handling equipment emitting diesel pollution daily.⁷

The correlation between cumulative impacts, race and income in New Jersey is presented graphically in figures contained in a power point and technical report⁸ on a nascent cumulative impacts screening tool that NJDEP is developing. In this early version of the screening tool nine indicators⁹ are combined to provide an estimate of the relative amount of cumulative impacts by block group¹⁰ in New Jersey. It could also be thought of as providing an estimate of the relative amount of pollution by block group. The figure clearly demonstrates that as the number of people Of Color living in block groups increases the amount of cumulative impacts, or pollution, also increases. Similarly, it shows that as the number of people living in poverty in block groups increases the amount of cumulative impacts, or pollution, increases. We believe this figure shows that as of 2009 the amount of pollution in neighborhoods in New Jersey is

⁷ Final report for the Ironbound Community Corporation CARE Cumulative Impacts Project at page 1. The grant period was from October 5, 2009 until September 30, 2011. The report can be accessed at <https://sites.google.com/a/ironboundcc.org/ironboundcare/resource-center>.

⁸ The technical report is entitled "A Preliminary Screening Method to Estimate Cumulative Environmental Impacts" and the figures can be found on page 5. The technical report can be accessed at http://www.state.nj.us/dep/ej/docs/ejc_screeningmethods20091222.pdf. The power point has the same title and the figures can be found on slide 19. The power point can be accessed at http://www.state.nj.us/dep/ej/docs/ejc_screeningmethods_pp20091222.pdf.

⁹ The nine indicators were NATA cancer risk, NATA diesel, NJDEP Benzene estimate, Traffic All, Traffic trucks, Density of Major Regulated sites, Density of Known Contaminated, Density of Dry Cleaners and Density of Junkyards. These figures were produced in 2009 and the number of indicators in the screening tool now totals approximately 34. But to the best of our knowledge the figures showing the relationship between cumulative impacts, race and income have not yet been reproduced using the greater number of indicators. The indicators and more information can be found on slide 5 of the power point at http://www.state.nj.us/dep/ej/docs/ejc_screeningmethods_pp20091222.pdf and page 3 of the technical paper at http://www.state.nj.us/dep/ej/docs/ejc_screeningmethods20091222.pdf.

¹⁰ Block groups are geographical areas defined by the U.S. Census that contain between 600 and 3000 people. They are "statistical divisions" of census tracts. See "Geographic Terms and Concepts – Block Group" on the U.S. Census website at http://www.census.gov/geo/www/2010census/gtc/gtc_bg.html.

connected to the race and income of their residents, and we further believe that all New Jersey residents would say that this very troubling relationship is unacceptable.

NJEJA believes that issuing an air permit to a power plant that will be capable of emitting two million pounds of toxic air pollution per year and will be sited in an overburdened disproportionately poor neighborhood, which is located in an overburdened city Of Color, which is part of state where pollution appears to be correlated with race and income, would represent a serious EJ problem and therefore the permit should not be issued.

Cumulative Impacts and the Hess NEC Power Plant

At the heart of the EJ problem the Hess NEC power plant would cause is a cumulative impacts problem. The issue of cumulative impacts concerns how to address multiple pollutants emitted by multiple sources in a neighborhood. The problem is that our legal and regulatory system attempts to address pollution by establishing individual standards for each pollutant. However, multiple pollutants may be having detrimental health impacts on community residents even if no individual standard is violated.¹¹ The proposed siting of the Hess NEC power plant in an overburdened Ironbound community represents exactly this situation.

One justification offered by NJDEP for issuing an air permit is that pollution from the Hess NEC power plant would not contribute significantly to the violation of a National Ambient Air Quality Standard (NAAQS),¹² however, NJDEP does indicate that

¹¹ An excellent discussion on the issue of cumulative impacts can be found in the report entitled “Strategies For Addressing Cumulative Impacts In Environmental Justice Communities which was issued by the Environmental Justice Advisory Council to the New Jersey Department of Environmental Protection in March, 2009 and can be accessed at http://www.state.nj.us/dep/ej/docs/ejac_impacts_report200903.pdf.

¹² See NJDEP Fact Sheet at page 25.

the plant would have some impact on air quality in the Ironbound community.¹³ The problem is that in a community such as the Ironbound that is already overburdened with pollution, any additional pollution or impact is significant and is too much. Because the community is already overburdened the fact that the pollution from the plant may not contribute to a violation of a NAAQS does not necessarily mean that it is not having a detrimental impact on the health of residents. Amounts of pollution that seem relatively small may pose a public health threat when combined with other pollution.¹⁴ In this case, no cumulative impacts analyses was performed or even attempted, that took into account the combination of pollutants that exists in the Ironbound community and showed that adding more pollution to this mix would not be detrimental to the health of Ironbound and Newark residents. NJDEP should exercise precaution¹⁵ when it reviews applications for pollution permits in already overburdened neighborhoods and reject these applications if the proposed facility would result in additional pollution. If NJDEP is unwilling to reject the application then at the very least it should require a cumulative impacts analysis that examines the mixture of different pollutants that may burden the health of residents. Permit applicants in overburdened neighborhoods should not only have to demonstrate that their facilities will not contribute to a violation of a NAAQS but that they will not

¹³ NJDEP Fact Sheet at pages 29-30.

¹⁴ See, for example, Mauderly, J.L. and J.M. Samet. 2008. "Is There Evidence for Synergy Among Air Pollutants in Causing Health Effects?" *Environmental Health Perspectives* 117(1):1-6. This article reviewed studies that investigated exposure to multiple pollutants. The review revealed that investigations had found additive, less than additive and synergistic effects from exposure to multiple pollutants. In the context of a community already overburdened with pollution it would seem reasonable to protect community residents from possible additive and synergistic effects of multiple pollutants by not allowing additional pollutants to be added to the existing mixture.

¹⁵ The cumulative impacts report issued by the Environmental Justice Advisory Council to NJDEP, *supra*, note 11, offered the following definition of a precautionary approach at page 37: "Taking anticipatory action to protect public health or the environment if a reasonable threat of serious harm exists based upon the best available science and other relevant information even if absolute and undisputed scientific evidence is not available to assess the exact nature and extent of the risk." (citation omitted)

cause detrimental health impacts by adding more pollution, in whatever amount, to the toxic soup that already exists.

Because the Hess NEC plant will add to the soup of pollution that already exists in the Ironbound community and the city of Newark, issuing an air permit to the plant could add to a cumulative impacts problem and NJDEP should reject the application. If NJDEP is unwilling to reject the application then it should require a true cumulative impacts analysis that looks at a combination of different pollutants. As we discuss below, this cumulative impacts analysis should be part of an EJ analysis and considered by NJDEP with other factors when deciding whether to issue a permit. All such analyses should be subject to public review and comment.

Offsets

If the air permit is issued, Hess NEC is required to obtain offsets for NO₂ (nitrogen dioxide) and VOC's (volatile organic compounds). It seems that Hess NEC has obtained these offsets but it appears that none of them are from facilities located in the Ironbound neighborhood, Newark or even in Essex County.¹⁶ This presents another classic EJ problem when pollution offsets are involved and one reason the EJ community has historically been suspicious of offsets.¹⁷ As appears to be the case in the present situation, the pollution offsets are purchased from a location where they will not benefit the community that is home to the polluting facility that needs the offsets. It is not at all clear that the pollution offsets obtained for the Hess NEC power plant will benefit the Ironbound community or Newark.

¹⁶ See NJDEP Fact Sheet at page 32.

¹⁷ For example, see the comments submitted by NJEJA on the Regional Greenhouse Gas Initiative in 2008, which are available upon request from the author of these comments.

NJEJA opposes the issuance of an air permit but if NJDEP does grant the permit it should use whatever legal authority it has to require that offsets for the Hess NEC power plant be obtained from facilities located in the Ironbound or Newark. If this is not possible it would be another reason for NJDEP to deny the air permit application based on EJ considerations.

Dispersion Modeling

As discussed above, although the dispersion modeling did not show a violation of a NAAQS it did indicate that pollution from the Hess NEC power plant would reach the Ironbound community. It is possible that the modeling could have shown a violation of a NAAQS if a better estimate of background air pollution concentrations in the Ironbound community were used. This could be particularly true for NO₂ whose background concentrations used in the modeling were based on a monitor located in Bayonne.¹⁸ It is likely this monitor underestimates background air pollution concentrations in the Ironbound neighborhood because it has more traffic than the area in which the Bayonne monitor is located, and therefore also more air pollution from mobile sources. There are at least three major roadways¹⁹ near the Ironbound community and this appears to be a higher concentration of roadways than in Bayonne where the monitor is sited. For

¹⁸ A monitor located in Jersey City measured background concentrations for SO₂ and CO. Background concentrations for PM_{2.5} and PM₁₀ were measured by a monitor sited at a Jersey City firehouse and NO₂ background concentrations were measured by a monitor located in Bayonne. (NJDEP Fact Sheet, Table 1 at page 28.)

¹⁹ The New Jersey Turnpike, US Route 1 & 9, and interstate 280 are all located near the Ironbound community and in some instances are only feet away from residential areas and businesses. *See* Figure 5-2 of the “Revised Dispersion Modeling Report” issued by Hess NEC and dated May 2012, for the location of the Bayonne monitors and major highways. The more specific information about the close proximity of some major highways to some residential areas and businesses in the Ironbound community was provided through personal communication with an Ironbound resident and employee of the Ironbound Community Corporation who has experience working on traffic related projects in the Ironbound community.

example, the Bayonne monitor appears to be approximately two miles away from the nearest major roadway whereas there are residential areas and businesses in the Ironbound neighborhood that are just feet away from a major roadway.²⁰ If background air pollution concentrations in the Ironbound community are higher than indicated by the Bayonne monitor then pollution from the Hess NEC power plant could be found to contribute to a violation of a NO₂ NAAQS if the modeling is repeated using the elevated background data.²¹ NJDEP should require the dispersion modeling be repeated with better estimates of the background air pollution concentrations in the Ironbound community gained either through actual monitoring or modeling that specifically accounts for the elevated amounts of traffic in the area. No air permit should be issued to the Hess NEC power plant until this more accurate modeling is completed and has been subject to public comment.

Another problem with the dispersion analysis is that, as we pointed out above, no true cumulative impacts analysis was performed. A multi-source analysis was performed for NO₂ but no analysis was performed that considered NO₂ in combination with other pollutants.²² Without this type of analysis we are unable to obtain anything approximating an adequate assessment of the impact the Hess NEC power plant might have on the residents of the Ironbound community and city of Newark. NJDEP should

²⁰ Personal communication with an Ironbound resident and employee of the Ironbound Community Corporation who has experience working on traffic related projects in the Ironbound community.

²¹ Multi-source modeling for NO₂ estimated that when pollution emitted by the Hess NEC power plant is combined with background pollution, maximum one hour NO₂ concentrations in the Ironbound neighborhood might range from 148.4-156.4 µg/m³. The one hour NO₂ NAAQS is 188 µg/m³ (NJDEP Fact Sheet at pages 29-30). Single source modeling showed that concentrations for PM_{2.5} on an annual basis would reach 11.0 µg/m³ and on a 24 hour basis 30.2 µg/m³. The standards for PM_{2.5} are 15.0 µg/m³ and 35.0 µg/m³, respectively (See Table 1 of the NJDEP Fact Sheet at page 28). But it is worth noting that the annual standard will be lowered by the USEPA in the near future. See Overview Factsheet – “Overview Of EPA’s Proposal To Revise The Air Quality Standards For Particle Pollution (Particulate Matter)”, which can be accessed at <http://www.epa.gov/pm/actions.html>.

²² See NJDEP Fact Sheet at page 29.

require a dispersion analysis that includes a cumulative impacts analysis that examines the impacts on Ironbound and Newark residents of the pollution emitted from the Hess NEC plant when it is added to and combined with existing pollution in the area. Until this type of analysis is performed in some form, and is subject to public comment, NJDEP should not issue an air permit to the Hess NEC plant.

We will discuss a cumulative impacts analysis further, and in the context of the EJ analysis that was performed, in the next section of these comments.

EJ Analysis

The EJ analysis performed in connection with the proposed Hess NEC power plant was inadequate. Factors it should have contained but were absent include: (a) health data, (b) a cumulative impacts analysis that attempts to account for the combination of pollutants that currently exists in the Ironbound community and Newark, (c) an equity analysis that at a minimum examines health disparities and NJDEP permit patterns, and (d) an alternative site analysis that actually considers other physical sites besides the one chosen. The USEPA Region 2 Interim EJ Policy that was used as guidance for the EJ analysis also requires an Environmental Load Profile (ELP) to be developed that represents the environmental burden the community is experiencing.²³ To the best of our knowledge this profile was never developed. The Interim EJ Policy is discussed further below.

Since NJDEP recognizes that Newark and the Ironbound community are already overburdened with pollution it would be prudent for NJDEP to gather as much

²³ The entire USEPA Region 2 Interim EJ Policy can be accessed at <http://www.epa.gov/region2/ej/poltoc.htm>. Section 2.2.4 of the Policy discusses developing an Environmental Load Profile and can be accessed at <http://www.epa.gov/region2/ej/guidelines.htm>.

information as possible about the health conditions of area residents before issuing an air permit that will allow more air pollution to reach Newark. For example, wouldn't it be useful to know the childhood asthma rate in Newark? There was no evidence of any attempt to gather health information on residents who will be breathing air pollution emitted by the Hess NEC plant in the NJDEP Fact Sheet that accompanied the proposed permit. The Region 2 Interim EJ Policy discusses including health data in the ELP.²⁴ Unfortunately an ELP was not developed either.

Because Newark and the Ironbound are overburdened communities we strongly believe that some attempt should have been made to perform a cumulative impacts analysis that took into account the combination of existing pollution in the city. We are aware that a cumulative impacts analysis is not a type of technical analysis that is currently performed on a routine basis. But there is existing guidance explaining how to perform a cumulative impacts analysis. For example, the National Environmental Policy Act provides such guidance²⁵ and, ironically, the NJDEP screening tool referred to earlier that demonstrates the relationship in New Jersey between, pollution, race and income, is a type of cumulative impacts analysis.²⁶ Knowing whether Newark and the Ironbound community suffer from a high or low amount of cumulative impacts compared to other areas in New Jersey would have been extremely pertinent information to consider while deciding if the air permit should be granted, especially if it is considered along with health data, an equity analysis and an alternative site analysis. The New Jersey screening

²⁴ See section 2.1.2 of the USEPA Interim EJ Policy under the heading "Health Data", which can be accessed directly at <http://www.epa.gov/region2/ej/guidelines.htm>.

²⁵ Council on Environmental Quality, Executive Office of the President. 1997. "Considering Cumulative Effects Under the National Environmental Policy Act." Available at <http://ceq.hss.doe.gov/nepa/ccenepa/ccenepa.htm>.

²⁶ "A Preliminary Screening Method to Estimate Cumulative Environmental Impacts", *supra*, note 8.

tool might have been able to provide this type of information. The ELP called for by the Region 2 Interim EJ Policy, while not a full-blown cumulative impacts analysis, would have at least provided NJDEP with an idea of the environmental burden that Newark and Ironbound residents are facing. However the NJDEP screening tool was not utilized nor was an ELP developed.

The EJ analysis should have contained an equity analysis that at a minimum examined health disparities and patterns in NJDEP pollution permitting. Understanding whether Newark and Ironbound residents suffer from higher rates of disease and mortality, along with disproportionate amounts of pollution, than other communities in New Jersey would be critical information to have while considering if another polluting facility should be added to the area. For example, before issuing the draft permit NJDEP should have ascertained if children living in Newark are still dying from asthma at a rate that is twice as high as the rate for children living in suburban and rural areas of Essex County.²⁷

Another important equity question should have been whether NJDEP is issuing a disproportionate number of air pollution permits in Newark and the Ironbound community. A related question is whether disproportionate permitting is driving the association between pollution, race and income in New Jersey? And if a proper EJ analysis reveals health disparities, another question to ask would be: Is disproportionate permitting indirectly causing those disparities by driving the troubling aforementioned association? Questions concerning basic fairness must also be entertained. If a proper EJ analysis reveals a disproportionate number of NJDEP pollution permits are issued in

²⁷ Bielory, L. 1997. "Asthma: A Management Crisis", Healthstate - The Magazine of the University of Medicine and Dentistry of New Jersey, vol. 15(1), winter, 1997.

Newark and the Ironbound community, is this fair? Is the association between race, income and pollution in New Jersey fair and shouldn't this relationship at least be a consideration in individual NJDEP pollution permitting decisions? Finally, NJDEP should examine its own permitting pattern to ensure it is not in violation of Title VI of the 1964 Civil Rights Act, which prohibits agencies that receive federal funds from acting in a discriminatory manner.²⁸ An air permit should not be issued to Hess NEC absent an EJ analysis that asks and answers the above questions regarding NJDEP permitting patterns, and is subject to public comment.

Questions about fairness highlight the fact that there was no apparent exploration of other locations besides the Ironbound for the siting of the Hess NEC power plant. EJ considerations forces one to ask if the Hess NEC plant could be sited in a location that is not disproportionately affected by pollution instead of adding yet another polluting facility to an already overburdened neighborhood. NJDEP states in its Fact Sheet that NJAC 7:27-18.3(c)(2) requires an analysis of alternative sites while demonstrating that benefits associated with constructing the power plant outweigh its environmental and social costs.²⁹ Yet there is no examination of other potential sites and what is offered is essentially a justification for siting the plant in the chosen location.³⁰ The primary justification for the proposed location seems to be the presence of existing infrastructure. But more important than existing infrastructure should be ensuring that the unacceptable connection between race, income and pollution is not perpetuated and there is no racial discrimination in permitting. Protecting already overburdened communities should also be of greater significance than existing infrastructure. Even if the fact that it doesn't

²⁸ Title VI of the 1964 Civil Rights Act, 42 U.S.C. § 2000d et seq.

²⁹ NJDEP Fact Sheet at page 20.

³⁰ NJDEP Fact Sheet at pages 20-21.

explore alternative sites is ignored, the analysis performed to justify selecting the Ironbound neighborhood as the site for the Hess NEC plant is still inadequate. It is incomplete because it doesn't discuss the societal costs of siting the plant in an overburdened Of Color city and an overburdened disproportionately poor neighborhood, and therefore perpetuating EJ problems in New Jersey.

According to the NJDEP Fact Sheet the EJ analysis was performed pursuant to the federal and state EJ executive orders.³¹ The USEPA Region 2 Interim EJ Policy was used as guidance in performing the analysis.³² Under this analysis Newark, Jersey City and “many of the block groups in the vicinity of the project” were found to be EJ communities.³³ The Region 2 Interim Policy was also used to determine if the Hess NEC power plant would impose an “adverse environmental burden” on EJ communities. If the EJ analysis reveals a disproportionately high and adverse human health or environmental effect then NJDEP can take several actions including not going forward with the permit application.³⁴ NJDEP appears to have used a definition for adverse burden from the Interim Policy's glossary that is contained in an appendix without reference to a definition included in the body of the policy. But what may be more problematic is that it misquoted and misapplied the definition from the glossary. NJDEP states that the definition is:

³¹ See NJDEP Fact Sheet at page 18. The federal executive order is number 12898 and the state executive order is number 131.

³² See NJDEP Fact Sheet at page 19.

³³ NJDEP Fact Sheet at page 19.

³⁴ See section 3.4 Responding to Disproportionate Effects, Evaluations, and Community Concerns of the region 2 Interim Environmental Justice Policy. It can be accessed at <http://www.epa.gov/region2/ej/permit.htm>.

“When there is an acknowledged health or welfare standard for the burden in question, the burden is adverse only when it exceeds that standard. When there is no standard, the decision is based on additional site specific analysis.”³⁵

The definition for adverse environmental burden in the glossary is exactly the same except the word “only” does not appear in the first line.³⁶ This is a critical difference because without the word “only” the definition does not preclude establishing an adverse environmental burden in some other manner besides a violation of a standard, even if a standard exists. In other words, if there is an existing standard and it is violated then that definitely establishes an adverse burden, but if the standard is not violated that does not necessarily mean there is no adverse burden. The definition contained in the body of the Interim Policy is worded differently than the one in the glossary and reinforces the idea that there are other ways to establish an adverse burden besides the violation of an existing standard. Section 2 of the Region 2 Interim Environmental Justice Policy is entitled “Guidelines for Conducting Environmental Justice Analyses”³⁷ and section 2.2.5 includes a section entitled “Evaluating Adverse Burden” that states in part:

“...when an acknowledged health standard for the burden in question is exceeded, the Region will consider the burden to be adverse unless otherwise indicated by supportive data.”

This definition leaves room for other ways to establish an adverse burden in addition to a violation of an existing standard. This is important because NJDEP found that the Hess NEC plant “would not cause or significantly contribute to a violation of an ambient air

³⁵ NJDEP Fact Sheet at page 19.

³⁶ See Appendix 2, Glossary of Terms, Region 2 Environmental Justice Interim Policy, at page 46. The entire policy can be accessed at <http://www.epa.gov/region2/ej/poltoc.htm>. The policy can then be downloaded or the definition in question can be found by clicking on appendix 3 and going to page 46.

³⁷ These guidelines can be accessed at <http://www.epa.gov/region2/ej/guidelines.htm>.

quality standard and, thus would not result in a disproportionately high and adverse burden on communities in the area.”³⁸ It also added that an air toxics assessment showed no significant risk but given the preceding statement it appears that assessment was not performed primarily for the EJ analysis.

NJDEP misapplied the definition for adverse burden in at least two ways. First, It apparently believed that an existing standard applied to the current situation and thought the only way to find there was an adverse burden was if an air quality standard was violated. NJDEP may have taken this position because it applied an incorrectly quoted definition. In any case, when correctly quoted versions of the definitions from the body of the Interim Policy and glossary are read together it is clear that an adverse burden can be established in other manners besides a violation of an existing standard. In the current situation NJDEP should have considered other factors such as the ones we have enumerated above (health data, a cumulative impacts analysis that examined a combination of pollutants, an equity analysis and an alternative site analysis) in deciding whether the Hess NEC plant would impose an adverse burden on the Ironbound community and Newark.

Second, under the current circumstances the second sentence of the definition from the glossary applies: “When there is no standard, the decision is based on additional site specific analysis.” In this case the “burden” that should be assessed is whether adding pollution from the Hess NEC plant to the pollution burden of already overburdened communities, that are also Of Color and poor, could harm the health of community residents in any manner or perpetuate an unacceptable existing relationship

³⁸ NJDEP Fact Sheet at page 19.

between race, income and pollution in New Jersey. There is no existing standard that addresses this matter and therefore the factors we enumerated above should be considered.

For several reasons NJDEP should deny the air permit application for the Hess NEC plant based on the EJ analysis that was performed. First, NJDEP did not utilize the definition for adverse burden contained in the body of the Interim EJ Policy and misquoted and misapplied the definition it did use. Second, NJDEP failed to consider several factors enumerated above that could have been of critical importance to the outcome of the EJ analysis. Third, the EJ analysis failed to include an ELP as required by the Interim EJ Policy.

If the EJ analysis of the Hess NEC power plant had been performed correctly, a disproportionately high³⁹ and adverse effect on human health and the environment would have been found. Therefore the air permit should be denied, or at the very least withheld until a proper EJ analysis is performed and then reconsidered based on the results of that analysis and other relevant information, and is subjected to public review and comment.

Displaced Emissions

Hess NEC has argued publicly that their proposed new power plant would displace emissions from dirtier power plants in northern New Jersey and therefore result in an overall improvement in air quality in the area. Although this argument does not

³⁹ It seems that the ELP, or ELP indicators, are used extensively in the process that indicates if a community is suffering from a *disproportionately high* (italics added) burden (See “Evaluating Disproportionately High Burden” under section 2.2.5 of the Interim EJ Policy. This can be accessed at <http://www.epa.gov/region2/ej/guidelines.htm>.) Since an ELP was not developed and ELP indicators apparently not used in this case, it could not be officially established under the USEPA guidelines whether Newark and the Ironbound are facing a disproportionately high burden but it is worth noting that, as mentioned above, NJDEP already recognizes that Newark is an area where there are “...disproportionate impacts from multiple sources of air pollution.” (NJDEP Fact Sheet at page 24.)

form a legal basis for the issuance of the air permit we comment on it since it has been made repeatedly.

One problem with the assertions are that they are based on future estimates of the price of natural gas and the demand for electricity that may appear reasonable now but are not guaranteed to be true during the 30 to 40 year operating life⁴⁰ of the power plant. In fact a report from a consulting firm that reviewed Hess NEC projections developed by their consulting firm (Quanta) commented that:

“All future estimates of fuel prices presented by Quanta are reasonable, and can be substantiated. However, these are only estimates and there are no assurances that fuel prices will remain on any predictable trend.”⁴¹

The Hess NEC plant appears to be insulated from variations in the price of natural gas for the first 15 years of the plant’s operations because it will receive government subsidies.⁴² However, there is no guaranty that these subsidies will be forthcoming for the final 15 to 20 years of the plant’s existence. Similarly, there is no guaranty that the projections concerning the demand for electricity are correct since Hess NEC does not control this market variable. One fear is that demand will be such that the Hess NEC plant will operate as planned and the other local plants will have to operate the same number of hours they do now instead of reducing their operating hours.

⁴⁰ Hess representatives gave this time period as the probable lifetime for the plant at several public hearings held in Newark during the winter and spring of 2012.

⁴¹ See the Executive Summary and the Summary and Conclusions sections of the following report: Eneractive Solutions. 2012. “Analysis Of ‘Unit Dispatch And Emission Reduction Analysis’ Report For The Proposed Newark Energy Center”. Eneractive Project No. PPS12-BG-702. On May 10, 2012 Eneractive Solutions issued a letter supplementing their original report.

⁴² See Johnson, T. 2012. “With Ratepayer Subsidies for New Plants revealed, Many Critics are Outraged”, NJ Spotlight, May 31, 2012; Thomas G., 2012. Op ED: “Fold ‘em – New Jersey’s Bet on power Plants Goes Terribly Wrong”, NJ Spotlight, June 19, 2012.

Another problem with the estimated emissions reductions from area plants due to the Hess NEC power plant is that they are not legally enforceable. For that reason if the projected reductions are wrong in whole or in part there are no consequences for Hess NEC. However, there may be consequences for the residents of Newark and the Ironbound community in the form of additional air pollution. It is true that Hess NEC has made an agreement with the city of Newark that may result in some air pollution reduction in the city but to the best of our knowledge these reductions have not been quantified so it not clear how they will compare to the plant's emissions or impact on air quality in Newark.

The discussion concerning these projected emissions reductions is linked to the discussion concerning the exploration of alternative sites for the location of the plant besides the Ironbound community. As it stands now since the projected emissions are not legally enforceable, residents of Newark and the Ironbound are being asked to take the risk that these estimates are incorrect. Even if the risk is very low why should communities that are already overburdened with pollution be asked to take the risk of more pollution? At some point shouldn't other communities that are not overburdened be asked to share the responsibility of activities that produce benefits for society but also produce some unwanted costs? It seems grossly unfair that no effort appears to have been made to explore siting the proposed plant in an area that is not already suffering disproportionate impacts from pollution.

Permit Conditions

NJEJA strenuously opposes the issuance of an air permit to the proposed Hess NEC power plant but if NJDEP grants the permit over NJEJA's opposition then it should contain the following conditions:

- Hess NEC should pay for continuous monitoring of PM, NO_x and VOC's in the Ironbound community and other designated areas of Newark to ensure plant emissions do not have a greater impact on Newark air quality than projected.
- All recommendations contained in the USEPA comment letter on the proposed plant dated April 17, 2012 should also be contained in the permit.
- Offsets for NO_x and VOC's should be obtained in the Ironbound, Newark or Essex County if it is legally possible.
- If the permit application relied in any way on estimated emissions reductions from other New Jersey power plants that will be achieved due to the operation of the proposed Hess NEC plant then achieving these emissions reductions should be made a condition of the air permit. For example, if the dispersion modeling relied in any way on those estimated reductions then the reductions should be a condition of the permit.

Conclusion

Issuing an air permit to the proposed Hess NEC power plant would raise serious EJ issues since its proposed location would be the city of Newark and the Ironbound community, both of which are overburdened with pollution. In addition, NJDEP's own data indicate that cumulative impacts in New Jersey is correlated with race and income, and the proposed plant runs the risk of perpetuating this relationship since Newark is disproportionately poor and Of Color, and the Ironbound community is disproportionately poor.

With the above facts providing the EJ context for the current air permit application, NJEJA urges NJDEP to deny the application for the following reasons:

- The plant would perpetuate and intensify an existing cumulative impacts problem because it would add pollution to Newark and the Ironbound community, both of which are already overburdened with pollution.
- There was no type of cumulative impacts analysis, or any other type of analysis, performed, or attempted, that demonstrated adding pollution to the mixture of pollution that already exists in these overburdened communities would not detrimentally affect the health of residents.
- It is unlikely that offsets the proposed plant has obtained for its NO_x and VOC emissions will benefit Newark or the Ironbound community.
- The dispersion analysis performed was inadequate because it did not sufficiently account for mobile sources in the Ironbound community. Additionally, it did not perform a cumulative impacts analysis that examined the existing mixture of pollutants.
- No alternative sites analysis was performed that actually examined other possible physical locations for the proposed plant besides the Ironbound community. The absence of this analysis violates NJAC 7:27-18.3(c)(2).
- The EJ analysis is inadequate because it misquotes and misapplies the definition of adverse burden, fails to consider a number of relevant factors, and does not include an ELP.

The above stated issues are individually and collectively sufficient to form a basis for denying the air permit.