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Via E-mail

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## Introduction

In conversations with the New Jersey Department of Environmental Protection (NJDEP),<sup>1</sup> we recommended the use of a methodology similar to CalEnviroScreen to perform an environmental justice (EJ) analysis that determines whether granting a pollution permit application would result in adverse cumulative environmental and health stressors that are higher in the relevant overburdened block group (the block group in which the proposed facility would be located) than in non-overburdened block groups in the state.<sup>2</sup> It appears that NJDEP is proposing to use a different methodology and the Ironbound Community Corporation, New Jersey EJ Alliance, Clean Water Action and Earthjustice do not necessarily disagree with the methodology but do believe it would be beneficial for NJDEP to compare the two methodologies and discuss the advantages and disadvantages of using the proposed methodology instead of CalEnviroScreen.<sup>3</sup> One reason this type of comparison could be beneficial is because CalEnviroScreen is probably the best-known and most vetted cumulative impacts methodology currently being utilized and stakeholders might wonder why it is not

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<sup>1</sup> Personal communication with members of the Ironbound Community Corporation, New Jersey Environmental Justice Alliance, Clean Water Action and Earthjustice.

<sup>2</sup> See N.J.S.A. 13:1D-160(c) (“[T]he department shall . . . deny a permit for a new facility upon a finding that approval of the permit, as proposed, would, together with other environmental or public health stressors affecting the overburdened community, cause or contribute to adverse cumulative environmental or public health stressors in the overburdened community that are higher than those borne by other communities within the State, county, or other geographic unit of analysis as determined by the department . . .”); *id.* 13:1D-160(d) (“[T]he department may . . . apply conditions to a permit for the expansion of an existing facility, or the renewal of an existing facility’s major source permit, concerning the construction and operation of the facility to protect public health, upon a finding that approval of a permit or permit renewal, as proposed, would, together with other environmental or public health stressors affecting the overburdened community, cause or contribute to adverse cumulative environmental or public health stressors in the overburdened community that are higher than those borne by other communities within the State, county, or other geographic unit of analysis as determined by the department . . .”).

<sup>3</sup> If NJDEP can informally share the results of any preliminary analysis of the two methodologies in some form, that would be beneficial for internal deliberations of the New Jersey EJ community and its allies.

being employed. Juxtaposing the methodologies, and explaining the advantages of using NJDEP's proposed methods, would improve the public's understanding of the proposed methodology and therefore increase confidence in its performance. Sharing this analysis could also allow the public to provide suggestions for improving the methodology.

The following paragraph describes our understanding of the operations of the two methodologies so that we can ensure our understanding matches that of NJDEP and any discrepancies can be discussed. NJDEP's methodology is also described in more detail in the first paragraph of the next section. CalEnviroScreen ranks individual stressors using a percentile system derived from raw data.<sup>4</sup> It then combines individual stressor rankings into an overall cumulative impacts score for each census tract in the state, which can also be converted into a percentile ranking.<sup>5</sup> Similarly, this method could be used in New Jersey to develop an overall cumulative impacts score for each block group in the state. NJDEP's proposed methodology also converts raw data into a percentile ranking for individual stressors from non-overburdened block groups in the state, and a raw score for stressors in overburdened block groups, but does not calculate an overall cumulative impacts score for each New Jersey block group.<sup>6</sup> Instead it simply counts how many individual stressors in the relevant overburdened block group would be above the 50<sup>th</sup> percentile of the same stressors in non-overburdened block groups across the state. It then compares the number of exceedances in the relevant overburdened block group to the number in the appropriate geographic unit of comparison. This count is performed both without consideration of any pollution permit application and taking into account any influence granting the permit would have on the raw score and percentile ranking of individual stressors in the relevant block group.

An advantage of CalEnviroScreen is that it captures variations in individual stressors through the overall cumulative impacts score, or if there are differences in the importance of individual stressors, there can be differential weighing of the stressors.<sup>7</sup> The method proposed by NJDEP would not capture this variation or differences because individual stressor scores are not incorporated into an overall cumulative impacts score and all individual stressors are weighed equally. However, calculating and capturing this variation could also be viewed as a weakness if there are questions about whether the data upon which it is based is sufficiently abundant or reliable. If the calculation of this variation is not deemed quantitatively robust by key actors then the entire methodology may be open to criticism and legally vulnerable. The abundance and reliability of data may vary between states, in general, and California and New Jersey, in particular. Capturing the variation in stressors and the differential importance of stressors is discussed further below in order to provide actionable suggestions that could be used if NJDEP does decide it would be productive to address these issues.

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<sup>4</sup> See California Environmental Protection Agency and Office of Environmental Health Hazard Assessment, CalEnviroScreen 3.0 - Update To The California Communities Environmental Health Screening Tool, January 2017.

<sup>5</sup> *Id.*

<sup>6</sup> See New Jersey Department of Environmental Protection, 6th EJ Rulemaking Stakeholder Meeting, June 2021.

<sup>7</sup> See California Environmental Protection Agency and Office of Environmental Health Hazard Assessment, CalEnviroScreen 3.0 - Update To The California Communities Environmental Health Screening Tool, January 2017.

An exploration of the differences in the two methodologies could reveal insights about each. We would further suggest, if time permits, that one way the methodologies could be compared is by demonstrating: 1) Which overburdened block groups at this time would exceed the average number of stressors that are above the 50<sup>th</sup> percentile of stressors in non-overburdened communities in the state using NJDEP's methodology; and 2) Which overburdened block groups in the state would currently be above the 50<sup>th</sup> percentile of cumulative impacts scores if such scores were computed using the CalEnviroScreen method.

## **The EJ Analyses**

As we understand it, NJDEP's proposed methodology would use data to create a percentile ranking for each individual stressor in non-overburdened block groups in the state by ranking raw scores for each stressor. When a facility applied for a pollution permit the number of individual stressors in the relevant overburdened block group that exceeded the 50<sup>th</sup> percentile of the same stressors in all non-overburdened block groups in the state, would be counted. If the number of stressors in the relevant overburdened block group that exceeded the 50<sup>th</sup> percentile of stressors in non-overburdened block groups in the state is greater than the number of exceedances in the appropriate geographical unit of comparison, then the block group would be considered cumulatively or disproportionately overburdened and the permit application would have the potential to be denied. The count of the number of 50<sup>th</sup> percentile exceedances would be performed in two ways. First, not including the contribution of the proposed facility to the existing stressors in the relevant block group and then, at a later point in the process, including the contribution.

There are a number of issues regarding this process that we discuss in these comments: 1) What is the appropriate geographic unit of comparison; 2) Under what circumstances will a facility be considered to have contributed to a stressor within the meaning of the cumulative impacts legislation; 3) What role should NJDEP play in the EJ analyses; 4) Are there any changes that NJDEP should consider incorporating into its proposed methodology; 5) How should a permit applicant represent the contribution its facility's operations will make to existing stressors in the relevant overburdened block group; 6) What should be included in the EJ Impact Statement (EJIS) developed by the permit applicant; and 7) What should be included in NJDEP's final review of the EJIS that occurs after the public hearing and after public input has been obtained? This is a set of questions that is particularly important to our organizations and we believe also for EJ residential communities. We discuss these questions immediately below. There is another set of questions posed by NJDEP concerning their proposed methodology that we attempt to answer in the next section of these comments.

### *1) What is the appropriate geographic unit of comparison?*

It appears that NJDEP is recommending that the geographic unit of comparison should be either: 1) the average number of exceedances of the 50<sup>th</sup> percentile of individual stressors in non-overburdened block groups on a state level; or 2) the average number of exceedances of

the 50<sup>th</sup> percentile of individual stressors in non-overburdened block groups in the county in which the proposed facility would be located; whichever of those two geographic comparison units has the lowest number of exceedances. We suggest another geographic unit of comparison to replace number two above: the average number of exceedances of the county in the state with the *lowest* average number of exceedances, even if this is not the county in which the proposed facility would be located. Comparing the average number of exceedances on a state level to the lowest average number of exceedances in any county would provide the most protection to overburdened communities and perhaps be the quickest way to bring the number of facilities in these communities into alignment with the number of facilities in the state's non-overburdened block groups. Comparing the block group to non-overburdened block groups within the same county may penalize those overburdened block groups for which permits are under consideration in counties with an existing higher burden of facilities.

*2) Under what circumstances will a facility be considered to have contributed to a stressor within the meaning of the cumulative impacts legislation?*

A facility should be considered to have caused or contributed to a stressor being higher in the relevant overburdened block group than other block groups in the state or county, if approving the permit application results in any absolute increase, irrespective of the amount of the increase, in any single stressor that was found to be higher than the 50<sup>th</sup> percentile relative to the appropriate geographic unit of comparison. This definition of a contribution from a facility is consistent with the language of the statute, which applies to all facilities that would:

“...together with other environmental or public health stressors affecting the overburdened community, *cause or contribute* to adverse cumulative environmental or public health stressors in the overburdened community that are higher than those borne by other communities within the state, county or other geographic unit of analysis...”<sup>8</sup>

It is important to note that the language of the statute does not specify a minimum amount before emissions or impacts from the applicant are considered to contribute to stressors. Thus it is consistent with the statute to consider any emission or impact from a facility, irrespective of size, to constitute a contribution to an existing stressor. This is also consistent with courts' interpretations of the terms “cause or contribute” in federal environmental laws.<sup>9</sup>

*3) What role should NJDEP play in the EJ analyses?*

NJDEP should perform the initial analyses that convert raw data into a statewide percentile ranking for each individual stressor in every non-overburdened block group in the state. Each individual stressor in every block group would have a raw score. In non-over-burdened block

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<sup>8</sup> N.J.S.A. 13:1D-160(c), (d) (emphasis added).

<sup>9</sup> See *Catawba Cty., N.C. v. E.P.A.*, 571 F.3d 20, 38–39 (D.C. Cir. 2009) (holding Clean Air Act's language about “contributing” to pollution does not require a finding of “significant” contribution); *Bluewater Network v. E.P.A.*, 370 F.3d 1, 12-15 (D.C. Cir. 2004) (same).

groups these raw scores would be converted into a statewide percentile ranking. The raw scores of the individual stressors in the overburdened block groups would be used to determine if those stressors would exceed the 50th percentile of the ranking for the same stressor in the statewide ranking of stressors from the non-overburdened block groups. NJDEP should make the percentile rankings and the methodology used to derive them available to the public, as well as to any facility applying for a pollution permit, on a publicly accessible website. NJDEP should also calculate the number of exceedances for each block group, the average number of exceedances for non-overburdened block groups on a state level and the average number of exceedances for non-overburdened block groups on a county level for every county in the state. NJDEP should indicate which overburdened block groups have more exceedances than: the statewide average number of exceedances for non-overburdened block groups, the average number of exceedances for non-overburdened block groups in its own county, or more exceedances than the county with the lowest average number of exceedances. Again, these data and the methodology used to derive them should be made available to the public on a publicly accessible website. The publicly available website should also include an online mapping tool that can display the individual stressors.

*4) Are there any changes that NJDEP should consider incorporating into its proposed methodology?*

NJDEP should consider whether any of the individual stressors should be weighed more than others and whether there is any reliable manner to capture variation between and in individual stressors that can be reflected in the overall analyses. For example, consider the possibility of assigning different weights to different stressors. We understand that the raw scores used for the 31 stressors vary significantly. This variation reflects very different characteristics such as the amount of direct health impact or risk, the quality and availability of data, and the factors that go into deriving the raw data. Consider the example of NATA cancer risk, which is derived from modeling and has a measure of risk to public health whereas the number of CSOs in a block group does not have a direct health risk measurement. How the addition of contributions from a single proposed plant will influence national modeling results of cancer risk are much less clear than how a single facility might contribute to density of permitted facilities or CSO outfalls. But NATA cancer risks may be a much more direct and impactful stressor than CSOs. The ability of NJDEP to distinguish more impactful stressors may be important to consider in the decision about whether or not to weigh certain stressors differently than others.

If NJDEP wanted to reflect the elevated impact of the NATA cancer risk stressor in the outcome of the overall methodology it could assign it the value of two stressors, if its value in the relevant overburdened block group exceeds the 50<sup>th</sup> percentile of the value of the stressor in the non-overburdened block groups in the state. In other words, an exceedance of this stressor would be counted twice and not just once, even though it is only a single stressor. Therefore, an exceedance of this stressor would move the count of stressor exceedances from, for example, ten to 12 instead of from ten to 11.

Similarly, an exceedance of the 50<sup>th</sup> percentile of the stressor from the non-overburdened block groups could be counted twice if the score of that stressor in the relevant overburdened group demonstrated a high variation from the average statewide stressor score, i.e. if the score was relatively high when compared to the scores of the same stressor in other block groups. Or perhaps even if it was in a relatively high percentile when compared to the percentile score of other different stressors. For example, if an individual stressor falls into the 95<sup>th</sup> percentile or above, because it will be at a relatively high level for that stressor, or probably for any other stressor, it could be counted twice to reflect its high value. Currently, NJDEP's proposed method would not capture this relatively high level of, or high variation in, this individual stressor score. The suggestion in this section is just one way in which some individual stressors could be weighed more than others or variation within stressors could be captured by the NJDEP's proposed methodology.

There are almost certainly other manners in which these goals could be achieved. Of course, NJDEP must first determine if it believes it would be beneficial to do so.

*5) How should a permit applicant reflect the contribution its facility's operations will make to existing stressors in the relevant overburdened block group?*

If the applicant is applying for a permit in an overburdened block group in which the number of stressors that exceed the 50<sup>th</sup> percentile in the statewide ranking of the same stressor in non-overburdened block groups is greater than that in the appropriate geographic unit of comparison, then the applicant would be required to describe the types and absolute amounts of pollution (i.e. for exposure and environmental effects stressors such as traffic, PM, ozone, etc) that would be emitted and their potential to contribute to stressors related to population characteristics (i.e. socio-economic stressors, health stressors, etc.). Any absolute amount of pollution or impacts to any of the stressors would be considered a "contribution" (see (2) above).

If the applicant is applying for a permit in a block group in which the number of stressors that exceed the 50<sup>th</sup> percentile in the statewide ranking of the same stressor in non-overburdened block groups is less than that in the appropriate geographic unit of comparison, then the applicant would be required to not only describe their absolute contributions to stressors or the potential to impact stressors, but to also calculate the amount the facility would contribute to the score of stressors that are below the 50<sup>th</sup> percentile.

The permit applicant should use the same method to calculate its contribution to existing stressors as NJDEP used to calculate the raw values for stressors and then to convert those raw values to a percentile ranking. If guidance is needed in addition to the manner in which NJDEP developed the raw scores and percentile rankings for the stressors, then NJDEP should develop such guidance. All applicants should use the same methods to calculate their contributions to existing stressors and the use of NJDEP methodology and guidance would ensure this occurred uniformly across all applications and stressor types.

There also needs to be a method by which applicants can report their contribution to environmental and health stressors that have not yet been identified as one of the 31 that would be addressed by the cumulative impacts law and its implementing regulations. In addition, it would be important for these additional stressors to be factored into NJDEP's analysis.

*6) What should be included in the EJIS submitted by the permit applicant?*

The EJIS should include the following:

- a) Identification of existing stressors in the relevant overburdened block group;
- b) Identification of the appropriate geographic unit of comparison;
- c) The number of stressors in the relevant overburdened block group that are above the 50th percentile of the same stressors in non-overburdened block groups in the state, not including any contribution from the proposed facility;
- d) A determination of whether the number of stressors in the relevant overburdened block group that are above the 50th percentile of the same stressors in non-overburdened block groups in the state is higher than the average number above the 50th percentile in the appropriate geographic unit of comparison not including any contribution from the proposed facility
- e) If the number of stressors in the relevant overburdened block group, without any contribution from the proposed facility, exceeding the 50th percentile is greater than that in the geographic unit of comparison then the applicant should describe all direct and indirect contributions the proposed facility would make to any stressors. This should include the amount of those contributions;
- f) If the number of stressors in the relevant overburdened block group, without any contribution from the proposed facility, exceeding the 50th percentile is less than that in the geographic unit of comparison then, in addition to the description of contributions mandated in section (e) immediately above, the applicant should also include how any contributions to stressors will affect the raw score of the stressors;
- g) Any pollution prevention measures that will be included in the design of the facility and any alternative designs or pollution control measures that were considered for the facility;
- h) The basis for a claim that a facility should be granted compelling public interest status.

The items that should be included in the EJIS are, of course, a very important issue. But what is also important is what should *not* be included in the EJIS. NJDEP has discussed whether other types of analyses, such as risk analyses and health impacts assessments, should be included in the EJIS, in addition to the methodology needed to determine whether granting the permit application would result in a disproportionate impact (i.e. the number of stressors in the relevant overburdened block that exceed the 50th percentile of the same stressors in non-overburdened block groups being higher than the number of exceedances in the appropriate geographic unit of comparison). We urge NJDEP to generally not allow any type of environmental or health impact analyses outside of the descriptions of contributions to

stressors that each proposed facility would have the potential to make directly or indirectly or a calculation of the contribution to stressors under the appropriate circumstances (see(6)(f) above). Other types of analyses would most likely be used in an attempt to convince NJDEP not to reject a permit even if the facility makes a contribution towards stressors and NJDEP determines there would be a disproportionate impact associated with the application. For example, facilities could hire consultants to conduct a modeling exercise using traditional environmental risk assessment methods to demonstrate that their relative contribution to PM levels, NOx levels or HAP levels are negligible in relation to stressor categories such as ozone days, NATA respiratory risk or even density of facilities. In areas that are highly impacted, with high relative concentrations of facilities and emissions, it might also be difficult to demonstrate how one facility would move a specific stressor score. Additionally, the applicant, with the assistance of risk analyses, might attempt to define a disproportionate or significant impact, or significant risk, differently than NJDEP's interpretation of these terms. In those cases where the number of stressor exceedances in the relevant overburdened block group is greater than in the geographic unit of comparison, a simple description of the direct and indirect contributions, as described in (6)(e) above, should suffice to demonstrate the facility's impact, without any additional modeling or calculations of cumulative risk.

It is also conceivable that these other analyses could be used to argue to NJDEP that a permit application should be rejected even if a disproportionate impact has not been found. However, given the difference in resources between community groups and proposed facilities, it is perhaps overwhelmingly likely that additional analyses will be used in an attempt to negate a rejection rather than to negate an approval. By routinely allowing additional analyses NJDEP would be inviting facilities to attempt to undermine the intended operation of the cumulative impacts law and regulations.

However, an option to allow for additional analysis could productively be given to facilities under certain limited circumstances in the case of applications for permit renewals or expansions. The applicant could be given the option to include collaborative health or environmental impacts analyses in the EJIS. If the analyses are performed it would be for the express purpose of weighing alternatives for conditioning permits. The applicant would review options for first avoiding on site detrimental impacts, then second for directly mitigating on site detrimental impacts and lastly for offsite or near-site mitigation options. The applicant should be required to involve local stakeholders and experts to help weigh various conditioning options, if the additional analyses are conducted. The local stakeholders and experts could also serve as a resource for establishing the feasibility and potential impact of the various proposed options. Examples of this type of analysis can be found at:

<https://www.neha.org/eh-topics/healthy-homes-0/health-impact-assessments>

or

<https://www.epa.gov/healthresearch/health-impact-assessments>



*7) What should be included in NJDEP's final review of the EJIS which occurs after the public hearing and after public input has been obtained?*

First, NJDEP should re-affirm that the correct methodology was utilized, in the correct manner, in the facility's determination of whether or not there will be a disproportionate impact connected to the facility's operation. The phrase "re-affirm" is used here because an initial review of the methodology should occur before the EJIS is issued to the public (see below). Both reviews should also ensure that any calculations not only used the correct methodology but were also performed correctly. The presentation of the analysis by permit applicants in the public process should also be vetted for accuracy and clarity.

Based on the finding in the EJIS of whether granting the permit would cause stressors in the relevant block group to be higher than in other block groups, NJDEP should officially approve or reject the permit application in this final review of the EJIS.

Another important question this review should answer is whether or not conditions should be placed on permits that do not cause stressors to be higher in the relevant overburdened block groups than other block groups? From an EJ perspective, under certain circumstances the answer to this question is in the affirmative. Even if a stressor is not above the 50<sup>th</sup> percentile of the same stressor in non-overburdened block groups across the state, if it is close to this mark and therefore in danger of exceeding it at some time in the near future, then it would be appropriate for NJDEP to condition a permit in a manner that would prevent an increase in the value of this stressor. That is, NJDEP should take steps to prevent this stressor from becoming worse. This is true if the application is for a new permit, a permit renewal or for a facility expansion. We suggest that if an individual stressor is above the 40<sup>th</sup> percentile then NJDEP should place conditions on an approved pollution permit in an effort to prevent the stressor from worsening.

### **Questions Posed by NJDEP**

The following questions were posed by NJDEP to stakeholders at one of the Department's public informational meetings on the cumulative impacts law and its regulations.

*1) Are the statutory methods of making the EJIS available (by the governing body, the clerk of the municipality and NJDEP website) sufficient?*

We suggest that the NJDEP share with the applicant, relevant contact lists of local civic organizations and EJ organizations that should receive the EJIS materials and meeting notifications via email or mail. The materials should also be shared with NJDEP's EJ Advisory Council.

*2) Should the regulations have a pre-application phase where NJDEP determines if the EJIS is sufficient?*

Yes, this pre-application phase should occur before the EJIS is distributed to the public. Prior to being subjected to public scrutiny, the EJIS should be reviewed by NJDEP to ensure the correct methodology has been used in the correct manner to determine if there would be a disproportionate impact, and under certain circumstances, the amount of that impact. This review should include a check of all calculations. In addition to this more technical type of review NJDEP should also make sure the EJIS can be understood by the lay public. (see below)

*3) Should NJDEP be able to request revisions to the EJIS after the applicant has distributed the EJIS for the public hearing?*

NJDEP should be able to request a revision in the EJIS after public distribution for at least two reasons. First, if NJDEP discovers an error in the EJIS that it did not identify in its initial review before the document was made public then it would be in the best interest of all stakeholders to allow such an error to be corrected. The second reason would be if NJDEP believes revisions should be made to the EJIS in response to input obtained from the public, including community residents, through the public hearing, written comments or other methods. This would seem reasonable because the primary purpose of public participation is to influence the regulatory process by raising valid concerns and providing new ideas. One way to respond to public input, in addition to appropriate denials of or conditions on permits, is an appropriate revision of the EJIS.

*4) Should NJDEP include the final EJIS with a final issued permit?*

It would be a good idea to ensure that if and when a final permit is issued, any EJIS that has been prepared in connection with the facility in question is attached to the permit. At the very least this would make it easier for an interested stakeholder, especially a community resident or community group, to ascertain and follow any changes in stressors connected to the facility from before the beginning of the facility's operation to any later point in time.

*5) What support, if any, should NJDEP provide to ensure the EJIS is understandable and to facilitate a response to its contents?*

NJDEP should provide at least two types of support in an effort to ensure the EJIS is comprehensible to the lay public and to enable a meaningful response to its contents. We first suggest that, in addition to a technical review, the contents of the EJIS should be reviewed by NJDEP regarding how easily it can be understood by the lay public, including community members. More specifically, within NJDEP, the EJ Office should review the EJIS to ensure it is understandable to the lay public since this office has experience working with the public and therefore has some expertise in determining what is likely to be easily utilized by community residents. The EJ Office should, of course, suggest any changes that would make the document more comprehensible by non-technical stakeholders.

NJDEP should also strongly consider organizing public workshops for each permit application, which explain the general operation of the law and its regulations, and then apply the law and regulations to the particular application in question. The methodology NJDEP is considering adopting is new and will challenge members of the public, and others, to fully understand its complexities. Therefore, NJDEP should be prepared to conduct public workshops for each permit application that will take community residents from the beginning of an EJIS to its end, using language that is accessible to a lay audience. These workshops should be held before, and in addition to, the required public hearing for a permit application so the public can make full use of the hearing.

### **Conclusion**

The Ironbound Community Corporation, New Jersey EJ Alliance, Clean Water Action and Earthjustice would welcome continued conversations with NJDEP on any of the ideas contained in these comments.

Respectfully submitted,

Ironbound Community Corporation

New Jersey Environmental Justice Alliance

Clean Water Action

Earthjustice