

Republic of the Philippines  
City of Davao  
**Office of the City Council**

**JOINT COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES,  
COMMITTEE ON AGRICULTURE AND FOOD, AND  
COMMITTEE ON HEALTH**

**COMMITTEE REPORT ON ITEM NO. 2200**

***“A RESOLUTION TO ENACT AN ORDINANCE BANNING AERIAL SPRAYING AND PROVIDING MECHANISMS FOR ITS GRADUAL PHASE-OUT IN AGRIBUSINESS PRACTICES WITHIN THE TERRITORIAL JURISDICTION OF DAVAO CITY AND PRESCRIBING GUIDELINES THEREOF”***

**BACKGROUND:**

An earlier committee report on the same present item was submitted by the Ad Hoc Committee charged with the consolidation of all the positions of all the stakeholders relative to the present item. A copy of the said consolidated report is hereby attached as *Annex A*.

The consolidated report was submitted to the City Council and was deliberated upon in the Session on September 26, 2006. The council came up with the position to solicit the stand of the Local Chief Executive on the issue. Thus, on October 3, 2006, a resolution authorizing the City Mayor to conduct studies on the effects of aerial spraying of pesticides as an agricultural practice by agricultural entities in Davao City was passed by the City Council.

In response to the above-stated resolution, the Office of the City Mayor, on December 04, 2006, furnished the Office of the Sangguniang Panlungsod the Summary Report on the Assessment and Fact-Finding Activities on the Issue of Aerial Spraying in Banana Plantations (*otherwise herein referred to as the Jacinto Report for brevity. A copy of which is hereto attached as Annex B*).

Foremost, the Jacinto Report stated as its observation that “*there is no conclusive finding that the cases complained of were due to aerial spraying as most of the cases can be caused by various allergens xxx*”. Yet, it observed that the complaint that aerial spray drift occur in certain areas and are experienced in certain instances by residents is not without basis.

Moreover, the Jacinto Report adopted the position of the Department of Health Center for Health Development stating that “*Banning aerial spraying and adopting only ground spraying does not eliminate the hazards of pesticides to which the workers and residents within and around banana plantations might be exposed. Presently, there is no scientific evidence to conclude that aerial spraying in banana plantations should be banned, and that further study is needed by the body before it could make a definite conclusion on the issue at hand.*”

On the issue of the effects of aerial spraying on coconut trees the Jacinto Report finds that “*it appears that coconut trees adjacent to banana plantations being aerial-sprayed with fungicides become susceptible to attack by the Rhinoceros beetle which damages young leaves (fronds) of coconut. This can happen when the fungus Metarhizium anisopliae, which infects and kills the Rhinoceros beetle is eliminated or killed by the fungicides that drift to the coconut. Thus, about 3-5 rows of coconuts adjacent to the banana plantations commonly manifest Rhinoceros beetle-damaged leaves.*”

First in its recommendations is that banana plantation companies/owners/growers must strictly follow health and safety regulations in the conduct of aerial spraying in that:

- All sprayable areas under aerial spraying must be identified thru GPS and copies of the GPS map should be provided the City Mayor's Office.
- All spray planes used for aerial spraying should be equipped with GPS equipment and an automatic on/off mechanism guided by the GPS. All spray pilots must be duly licensed by the Air Transportation Office and shall secure accreditation with the Fertilizer and Pesticide Authority.
- Aerial spray application shall be limited only at temperatures of 22 to 28 degrees centigrade and wind velocity of not more than 5 miles per hour.
- Notification in writing of any aerial spray application should be undertaken at least 24 hours before any aerial spray operations. Sirens or other warning systems must be installed and sounded off at least thirty (30) minutes before aerial spraying when allowed.

While the Jacinto report opines that there is no scientific basis to ban aerial spraying at this time, it, however, recommends that *"aerial spraying should be allowed only in existing agricultural farms with a compact area of not less than fifty (50) hectares. However, if and when there are communities/houses, major rivers and city and national roads adjacent the said compact farms, a buffer area of not less than 50 meters must be established"*. Of almost same import is its recommendation that *"in order to avoid recurring concerns and potential complaints regarding the health and safety of people, aerial spraying should be prohibited in all new areas that are not compact and less than 50 hectares. New areas for development should already include well-planned road networks for the efficient conduct of ground spraying."*

With all that have been said on the nature of pesticides vis-à-vis aerial spraying, the Jacinto Report adopted the position of the Department of Health Center for Health Development Davao Region that *"the long term use of organic pesticides in lieu of chemical pesticides should be adopted for both ground spraying and aerial spraying as it will eliminate the hazards that chemical pesticides pose to human health."*

It is, however, notable that the Jacinto Report mentions that *"in the event that aerial spraying as a method of fungicide application is banned as a matter of policy, a phase out period should be determined in order that the necessary road network of affected plantations can be designed and constructed. Also, the capital expense and equipment essential to have an efficient ground spraying operation can be programmed and procured by the companies concerned."*

The foregoing statements are but recommendatory in nature. In its letter to the Honorable Members of the Council, the City Mayor stated that it is hoped that the Council Members find the (Jacinto) report useful in their deliberations and in determining alternative courses of policy action.

Thus, on December 29, 2006 a Joint Committee hearing by the Committees on Environment and Natural Resources, Committee on Agriculture and Food and Committee on Health was conducted where the various stakeholders were made to comment on the Jacinto Report. Some of them submitted their written comments and were also heard orally before the hearing.

## **HIGHLIGHTS**

The following are the highlights of the comments by the different stakeholders on the Jacinto Report:

1. IDIS' comments were censorious and were presented in a detailed form attacking almost every point made. They are the following:
  - a. The meeting between the leaders of the Mamamayang Ayaw sa Aerial Spraying (MAAS), the City Planning and Development Coordinator (CPDC) and other members of the government team looking into the aerial spraying issue was deplorable as the government team led by the CPDC was dismissive of the complaints of the communities directly affected by aerial spraying despite the fact that they have not conducted field survey on the affected areas yet at the time of the meeting. The affected communities were offended by the attitude of the CPDC as the latter was laughing off their complaints.
  - b. IDIS posed questions regarding the review of health cases/complaints of persons by Jacinto et. al., and are the following:
    - i. Did they conduct blood tests, health examination, document the history of exposure to pesticides of the complaining residents?
    - ii. Did the team consult with reputable toxicologists who are the experts in pesticide poisoning to reach reliable conclusions on the health complaints?
    - iii. There are numerous studies on the effects of pesticides on people's health and environment, various toxicological information on pesticides. Why were these not mentioned at all in the report?
  - c. The burden of proof to produce evidence that aerial spraying causes harm to people has been passed by the local government officials of this City to those who are victims of the aerial spraying practice despite testimonies of experts on the matter being sprayed, the pesticides, are inherently toxic.
  - d. There is no scientific basis for the City Health Office to arrive at the conclusion that there are "no cases of untoward manifestations due to aerial spraying" because they did not conduct the necessary tests and procedures to validate whether or not the victims are contaminated or exposed with pesticides.
  - e. The Jacinto Report failed to take notice of the testimony of Dr. Lynn Panganiban, head of the National Poison Management and Control Center of the University of the Philippines, Manila, given during the special City Council Committee as a Whole session that "Pesticides are inherently poison, it harms man and the environment; that pesticides are non-selective of their targets; that Risk = toxicity x exposure; and that using the formula therefore, aerial spraying exposes more people to the risks of pesticide contamination."
  - f. Despite their (PBGEA) use of GPS technology, residents living within banana plantations and on adjacent communities still complain of being sprayed or hit by drift.
  - g. As to the recommendation of accrediting pilots with the FPA, the FPA Regional Officer, Estrella Laquinta admitted that there are no national policies, or regulations that would police aerial spraying practice in this country and they are on the process of developing Proposed Guidelines on Training and Accreditation of Pilots and Licensing of Establishments

Involved in Aerial Spraying of Pesticides. Therefore, there are actually no formal trainings and accreditation of aerial spraying pilots in the Philippines to speak of.

- h. In sum, they find the Jacinto Report to be unscientific and baseless since:
  - i. It did not provide sound proof that pesticides that are being sprayed are safe and thus must be the basis for not banning aerial spraying practice;
  - ii. It did not provide sound evidence to counter the fact that aerial spraying increases the exposure of people and environment to the toxic effects of pesticides;
  - iii. The City Health Office did not do the medical tests necessary to validate the health complaints of the aerial spraying victims. For lack of conviction or expertise on the matter, the said office should have sought the help of experts such as toxicologists rather than make conclusions that the complaints of the communities were inconclusive;
  - iv. Most of the recommendations provided in the Jacinto Report are supposed to be the current agricultural practice of the plantations in employing aerial spraying. Making another set of recommendation on the matter simply implies that either it is not working on the ground or the banana plantations simply do not follow it in practice. Thus, following the recommendations of the report would not address the legitimate complaints of the communities affected by aerial spraying.
2. PBGEA accepts the recommendation in the Jacinto Report that aerial spraying should be allowed only in existing compact areas of not less than fifty (50) hectares, and should be prohibited in all new areas that are not compact and less than 50 hectares.

PBGEA, however, maintains that the 50 meter buffer zone in areas where there are communities/houses, city and national roads, should be at 30 meters in accordance with ISO 1400 and DENR ECC requirement. As for major rivers, existing national or local laws should apply.

The Association also accepts the recommendation that for rivers and streams with channels of at least five (5) meters wide and other major water bodies, i.e. lakes, at least a twenty (20) meter buffer area along the edge of the normal high waterline should be provided.

PBGEA poses the question that “what event/s would justify the banning of aerial spraying method as a matter of policy?”

On the issue of phase out period in the event that aerial spraying method of pesticides application is banned as a matter of policy, PBGEA comments that a period of at least 25 years should be considered in view of the capital expense required in the conversion from aerial to ground spray application.

It further commented that all employees undergo pre-employment physical examinations, and that regular annual physical examination is presently provided to all farm workers directly handling pesticides except for the cholinesterase test which is only given to farm workers handling pesticides that are cholinesterase inhibitors.

3. To Err on the Side of Caution: Deciding in Favor of Banning Aerial Spraying. This is the title of the position paper of SALIGAN Mindanaw. The same is rooted on the Precautionary Principle which the group advances that the City Council should take in deciding on the fate of the proposed ordinance.

The Principle states that wherein local decision makers take immediate preventive action using the best available knowledge, in situations where there is reason to think that something is causing a potentially severe or irreparable environmental harm- even in the absence of conclusive scientific evidence establishing a causal link. This is short of saying that it is better to err on the side of caution in terms of the environment.

SALIGAN Mindanaw commented that the Jacinto Report has not really responded to the call for comprehensive studies regarding the effect of aerial spraying on the health and environment, but merely placed the burden on those who seek to ban the aerial spraying activity. As a matter of fact, just to place those who supported the ban on the defensive stance, it has concluded without necessarily citing its references, that “there is no conclusive scientific basis to ban aerial spraying at this time.” Reading the report from a different perspective, one can conclude that there is indeed no conclusive scientific basis *not* to ban aerial spraying.

From the statements that “there is no conclusive finding that the cases complained of were due to aerial spraying as most of the cases can be caused by various allergens that he/she may be exposed to,” and “Workers similarly situated as some of the complainants were also interviewed and examined but did not manifest any symptoms or skin lesion,” one might even wonder where the allergens come from? If the report would assume that workers are similarly situated to the community, then that is a wrong assumption given the fact that workers should have personal protective equipment, unless the workers are similarly situated in such a way that both class of people have no PPE.

SALIGAN poses the question that up to what conclusive evidence does the team look for? Dead bodies? We do not want to go into that.

Dr. Romeo Quijano, a noted international toxicologist and Professor of Pharmacology and Toxicology of the UP College of Medicine, even submitted his expert professional opinion that the diseases he observed in Davao del Sur are directly related to their exposure to chemicals and major part of this exposure is of aerial spraying. He in fact observed further that there are similar cases noted in Mandug involving the same illnesses, same situation, and in fact, the same company.

SALIGAN cited the position made by the local City Health Office that “The City Health Office supports the move, intent and purpose of the proposed ordinance. The aerial spraying method of application cast doubt and uncertainty as to the health thus unsafe and may pose imminent hazard. Furthermore, the continued use of aircraft will likely result in unreasonable adverse effect on the public, environment or will involve unreasonable hazard to ecology and survival of endangered species.”

In support to the above position by the local City Health Office, SALIGAN advances that it is unthinkable that our own local team submitting the Jacinto Report would put greater weight on national agencies such as the Department of Health with respect to the condition of health and welfare of our people. This City Health Office is even mandated to recommend to the Sanggunian the passage of such ordinances as may deem necessary for the preservation of public health, which the Department of Health has merely on national level.

In view of the contentious findings of the Jacinto Report, the same should only be part of the whole aspect of positions submitted to the Sanggunian.

4. In its position paper the Mamayan Ayaw sa Aerial Spray (MAAS) commented that the Jacinto Report recognized the hazards posed by pesticides; that the Report proceeded to adopt the stand that pesticides should be “judiciously

handled and applied”. MAAS went on further that the Report refuses to see that such hazard is increased by using the pesticides by aerial spraying. For MAAS, banning aerial spraying is a form of judicious handling and application of pesticides.

MAAS points that the Jacinto Report is weak for requiring deaths as the barometer to warrant the banning of aerial spraying of pesticides. Sound public health policy does not demand epidemiologic proportion before government may take proper action. The City Council would do well not to allow the concerned residents to become human guinea pigs in determining whether or not aerial spraying should be banned.

Finally, MAAS cited the Supreme Court ruling in *Oposa vs. Factoran* that “the right of the inhabitants to a balanced and healthful ecology in accord with rhythm and harmony of nature as enshrined in the 1987 Philippine Constitution co-exist with the obligation to protect the same, and the assertion of such right is a performance of said obligation.”

5. The Center for Health Development Davao Region is generally agreeable to the contents of the Jacinto Report. In fact, the highlights of their Position Paper on the issue were adopted in the Jacinto Report. To each of these highlights, they made additional comments, to wit:

“Boom spraying, like manual spraying, takes some time to complete the spray cycle depending on the vastness of the plantation covered. It means that persons involved in the work are exposed to the chemicals for a longer period of time. Drift from boom spraying may also hit unintended areas depending on the wind direction and velocity.”

“In aerial spraying, the fungicide drift may hit more unintended areas depending on the wind direction and velocity and the height of the plane used in the operation. However, exposure to the drift lasts shorter period because of the swiftness of spraying.”

“This Office is presently preparing to undertake a prospective study to determine the health effects of pesticides used in both aerial spraying and ground spraying in banana plantations. We hope that with the result of this study we can arrive at a sound conclusion and determine our future policy options on the issue.”

“Fungicides used in aerial spraying in banana plantations usually belong to Category 4 (may be distributed for commercial use without a permit but should not be available to the general public because they are still toxic) and are toxic in their concentrated form so they need to be properly labeled, stored, and handled carefully. However, the concentration of the fungicides is made thinner when diluted with water and oil to make spray solution. One-time exposure to this solution can kill the Sigatoka fungus in banana plants without producing harm to human health.”

“The benefits of organic farming in terms of health and environmental considerations have been widely accepted. However, its commercial application will depend on its feasibility. We stand for more researches to produce organic pesticides that are safe to human health, friendly to the environment and beneficial to the economy.”

6. In their letter to City Mayor Duterte, the Participants of the International Forum on Alternatives to Corporate-Led and Regional Integration: A Parallel Civil Society Forum in the 12<sup>th</sup> ASEAN Summit, stated that they have unanimously agreed to urge the Mayor's Office to finally put to stop a very inhumane practice of large monocrop banana plantations in Davao City, which is aerial spraying.

Lastly, they stated that they “have read and carefully studied of the paper prepared by Civil Society Organizations (CSOs) opposed to said practice titled 20 REASONS TO BAN AERIAL SPRAYING IN DAVAO CITY. We find the arguments forwarded by the CSOs to be in order, well argued, and enlightening. We urge you to carefully weigh these compelling arguments in guiding your decision on this case.”

7. The Davao Medical Society, Inc. and the health sector of Davao City, both composing of medical doctors, nurses and medical students, declared that the people of Davao City should not be deceived in thinking that we need more studies to prove that the aerial spraying of pesticides are not dangerous. Using the PRECAUTIONARY PRINCIPLE, the burden of proof should not be on the victims whose exposure have already affected their health. And it cannot be denied that further exposure will subject them and their future generations to more health hazards and, on a long term basis, their economic productivity.

The Society pleaded that the people of Davao City be in solidarity with the people primarily affected by the aerial spraying of pesticides, which are the Society's patients.

In support of the move to ban aerial spraying of pesticides, the Society urged the banana companies and growers to explore other alternatives and not sacrifice the lives of the people living around the plantation. They also urge them to live by the corporate responsibility that they claim to exercise.

The group also addressed the City Council not to wait for the scientific certainty of deaths and diseases as evidence that the banana companies desire. They warned that many of the damages as a result of the long term exposure are irreversible. According to the Society, the evidence already exists in their patients and yet the banana plantations need more evidence of human suffering. As doctors the members of the Society uphold the principle “PRIMUM NON NOCERE” which means FIRST, DO NO HARM. As humans we are responsible for protecting, preserving and restoring life.

## **FINDINGS**

The question of whether or not aerial spraying as an agricultural practice should be banned in Davao City has been hanging before the City Council for some time now. In order to help in its decision-making, it welcomed the offer of the City Mayor to conduct a study to further enlighten the members of the council. The result of this study has been submitted and has been referred to as the Jacinto Report.

The Jacinto Report has been carefully and meticulously reviewed by this Committee, as it has done with the other reports and position papers submitted for our consideration by the various interested groups. Not only that, it has also been submitted to the whole Council and the public for everyone's scrutiny. Interested sectors have even submitted their written comments to the said Jacinto Report.

After such meticulous consideration of the Jacinto Report together with the avalanche of other positions studied by this Committee, we have been just as convinced that aerial spraying must be banned in Davao City.

We have heard both sides of the issue. Public health and environment vs. local economy.

The two are of great importance to any civilization. But when both factors collide, the policy of the State comes in to shed light and to remind us of the basic framework in which the government is created.

The Constitution provides in Article II thereof, that, in Section 15, “The State shall protect and promote the right to health of the people and instill health consciousness among them” and in Section 16, “The State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature”.

It is also the policy of the State to promote economic growth that adheres to the principles of sustainable development embodied in Philippine Agenda 21, the overarching development framework of the country. Sustainable development embraces the threefold goal of economic development, environmental impact and social involvement.

Moreover, Principle 15 of the Rio Declaration on Environment and Development, to which the Philippines is a signatory, provides that in order to achieve sustainable development, politics must be based on the Precautionary Principle. Environment measures must anticipate, prevent, and attack the causes of environmental degradation. Where there are threats of serious, irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

Be it remembered that the Committee is not against banana plantations, but against the method of aerial spraying of pesticides employed by roughly 25% of the agricultural entities.

The proposed Ordinance is a valid exercise of Police Power of the local government because this local legislation places the interests of the public in general over those of a particular class, that is, the interest of the Davaoños to health and to a clean and healthy ecology vis-à-vis the interests of the agricultural entities engaged in aerial spraying. Banning of aerial spraying is a reasonable and necessary response of the local government to ensure the health of its constituents. It is not unduly oppressive as it does not ban agricultural activities nor does it ban the use of pesticides altogether, the proposed Ordinance merely bans a method of application of pesticides that is being used by only a meager percentage of all the players in the agricultural sector of the City.

It is indubitable that pesticides are inherently poisonous. That they can also harm man and environment and that is a given. The Committee takes notice and adopts the expert testimony of Dr. Lynn Panganiban, Head of the National Poison Control and Management Center, University of the Philippines, Manila, offered before the Sanggunian converted as a Committee as Whole, that “there are studies that have shown that pesticide vapor is the best predator of the child. The theory now of cancer development is a one cell hit theory, meaning one molecule in our organ could be hit and this can already produce clonal transformation which will eventually develop into cancer. There is no such thing as safe dose when it comes to pesticides and fungicides.”

Given the fact that pesticides are by its nature poisonous, it is all the more dangerous when dispensed aerially through aircraft because of unstable wind drift which in turn makes the hitting of unintended targets a commonplace.

With the above situation, aerial spraying of pesticides is undeniably a nuisance. The New Civil Code of the Philippines defines nuisance as “any act, omission, establishment, condition of property, or anything else which injures or endangers the health or safety of others, or annoys or offends the senses ..., or obstructs or interferes

with the free passage of any public highway or street, or any body of water, or hinders or impairs the use of property”. In short, nuisance may be used to refer to either to the harm caused or that which causes the harm.

Looking at the plight of the complainants and other stakeholders opposed to aerial spraying, the issue of aerial spraying of pesticides is in all fours a nuisance. Given the vastness of the reach of aerial spraying, the said form of dispensation falls into the category of a public nuisance which in turn is defined by the New Civil Code as one which affects a community or neighborhood or any considerable number of persons, although the extent of the annoyance, danger or damage upon individuals may be unequal.

To repeat, banning aerial spraying as an agricultural practice is a valid exercise Police Power. To say that there is no conclusive scientific basis to warrant the banning of aerial spraying of pesticides is like courting danger at the expense of the affected inhabitants and the environment. Pesticides are poisonous, aerially spraying it is a nuisance, banning its aerial application is a justified response. Can anyone imagine an urban area being aerially sprayed with pesticides? What makes the life and safety of the inhabitants of a community in nearby agricultural entities where aerial spraying of pesticides less? To remain indifferent to the plight of those being aerially sprayed with pesticides is inhuman.

Even assuming *arguendo* that the arguments in favor of banning aerial spraying deserves lesser merit, issues concerning health and environment will be best addressed if the side of caution is adopted. As to the issue that there is no conclusive scientific study to warrant the banning of aerial spraying of pesticides as an agricultural practice, the City Council should be guided by the Precautionary Principle which states that local decision makers must take immediate preventive action using the best available knowledge, in situations where there is reason to think that something is causing a potentially severe or irreparable environmental harm- even in the absence of conclusive scientific evidence establishing a causal link. This is short of saying that it is better to err on the side of caution in terms of the environment.

It is for the above reasons that the Committee recommends the absolute and immediate halt to the agricultural practice of aerial spraying by agricultural entities in Davao City. Moreover, the long term use of organic pesticides in lieu of chemical pesticides should be adopted for its application as it will eliminate the hazards that chemical pesticides pose to human health.

### **RECOMMENDATION**

In view of the foregoing, it is recommended to submit a resolution to enact an ordinance banning aerial spraying as an agricultural practice in all agricultural entities in Davao City.

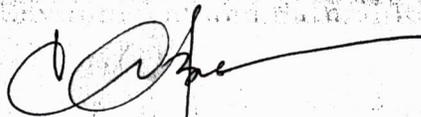
**SIGNED BY THE COMMITTEE MEMBERS**  
**Committee on Environment and Natural Resources**



**HON. LEONARDO R. AVILA III**  
Chairperson



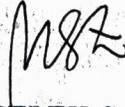
**HON. ARNOLFO RICARDO B. CABLING**  
Vice- Chairperson



**HON. CONRADO C. BALURAN**  
Member



**HON. SUSAN ISABEL RETA**  
Member

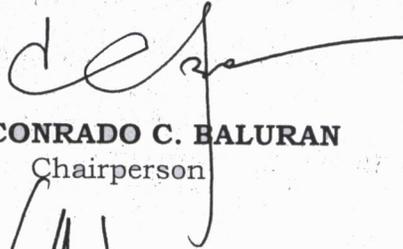


**HON. MARIA BELEN S. ACOSTA**  
Member

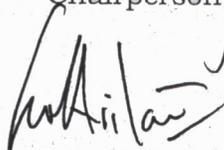


**HON. EMMANUEL D. GALICIA, SR.**  
Ex-Oficio member

**SIGNED BY THE COMMITTEE MEMBERS**  
**Committee on Agriculture and Food**



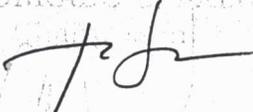
**HON. CONRADO C. BALURAN**  
Chairperson



**HON. LEONARDO R. AVILA III**  
Vice- Chairperson

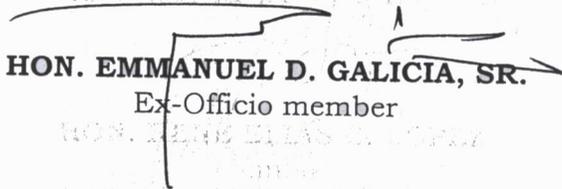


**HON. JIMMY G. DUREZA**  
Member



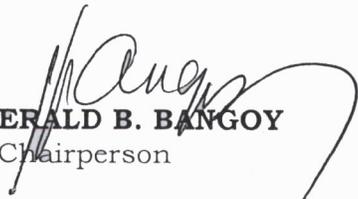
**HON. RENE ELIAS C. LOPEZ**  
Member

**HON. DANTE L. APOSTOL, SR.**  
Member



**HON. EMMANUEL D. GALICIA, SR.**  
Ex-Officio member

**SIGNED BY THE COMMITTEE MEMBERS**  
**Committee on Health**



**HON. GERALD B. BANGOY**  
Chairperson



**HON. RENE ELIAS C. LOPEZ**  
Vice- Chairperson



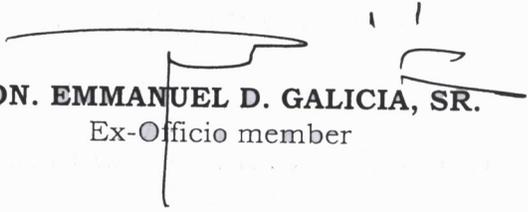
**HON. JOSE LOUIE P. VILLAFUERTE**  
Member



**HON. ANGELA LIBRADO-TRINIDAD**  
Member



**HON. MARIA BELEN S. ACOSTA**  
Member



**HON. EMMANUEL D. GALICIA, SR.**  
Ex-Oficio member

Republic of the Philippines  
City of Davao  
**Office of the City Council**

**RESOLUTION NO. \_\_\_\_\_**  
**Series of 2007**

**A RESOLUTION TO ENACT AN ORDINANCE BANNING AERIAL SPRAYING  
AS AN AGRICULTURAL PRACTICE IN ALL AGRICULTURAL  
ENTITIES IN DAVAO CITY**

WHEREAS, the City of Davao, with fertile lands and ideal climactic condition, hosts various large farms planted with different crops;

WHEREAS, these farms lay adjacent to other agricultural businesses and that residential areas abuts these farm boundaries;

WHEREAS, aerial spraying as a mode of applying chemical substances such as fungicides and pesticides is being used by investors/companies over large agricultural plantations in Davao City;

WHEREAS, the Davao City watersheds and ground water sources, located within and adjacent to Mount Apo may be affected by the aerial spraying of chemical substances on the agricultural farms and plantations therein;

WHEREAS, the effects of aerial spraying are found to be detrimental to the health of the residents of Davao City most especially the inhabitants nearby agricultural plantations practicing aerial spraying;

WHEREAS, the unstable wind direction during the conduct of aerial spray application of these chemical substances pose health hazards to people, animals, other crops and ground water sources;

WHEREAS, in order to achieve sustainable development, politics must be based on the Precautionary Principle. Environment measures must anticipate, prevent, and attack the causes of environmental degradation. Where there are threats of serious, irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;

WHEREAS, is the policy of the City of Davao to ensure the safety of its inhabitants from all forms of hazards, especially if such hazards come from development activities that are supposed to be beneficial to everybody;

WHEREAS, pesticides are by its nature poisonous, it is all the more dangerous when dispensed aerially through aircraft because of unstable wind conditions which in turn makes aerial spray drifting to unintended targets a commonplace.

WHEREAS, aerial spraying of pesticides is undeniably a nuisance.

WHEREAS, looking at the plight of the complainants and other stakeholders opposed to aerial spraying, the issue of aerial spraying of pesticides is in all fours a nuisance. Given the vastness of the reach of aerial spraying, the said form of dispensation falls into the category of a public nuisance. Public nuisance is defined by the New Civil Code as one which affects a community or neighborhood or any

considerable number of persons, although the extent of the annoyance, danger or damage upon individuals may be unequal.

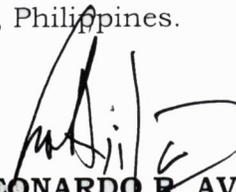
WHEREAS, the General Welfare Clause of the Local Government Code empowers Local Government Units to enact ordinances that provide for the health and safety, promote the comfort and convenience of the City and the inhabitants thereof;

**NOW THEREFORE, BE IT RESOLVED AS IT IS HEREBY RESOLVED**, that for the health, safety and peace of mind of all the inhabitants of Davao City, let an ordinance be enacted banning aerial spraying as an agricultural practice in all agricultural entities in Davao City.

**ADOPTED**, this \_\_\_\_ day of January 2007, Davao City, Philippines.



**HON. NENITA R. ORCULLO**  
Proponent



**HON. LEONARDO R. AVILA III**  
Chairperson  
Committee on Environment and  
Natural Resources

Republic of the Philippines  
**SANGGUNIANG PANGLUNGSOD**  
City of Davao

**ORDINANCE NO.** \_\_\_\_\_

**AN ORDINANCE BANNING AERIAL SPRAYING  
AS AN AGRICULTURAL PRACTICE  
IN ALL AGRICULTURAL ENTITIES IN DAVAO CITY**

---

**Section 1. Title.** This ordinance shall be known as “An Ordinance Banning Aerial Spraying As An Agricultural Practice In All Agricultural Entities In Davao City”.

**Section 2. Policy of the City.** It shall be the policy of the City of Davao to encourage its agricultural industry towards organic farming for the safety of all its citizens and the protection of its pristine environment. The long term use of organic pesticides in lieu of chemical pesticides should be adopted to eliminate the hazards that chemical pesticides pose to human health and environment. It shall be the policy of the City of Davao to eliminate the method of aerial spraying as an agricultural practice in all agricultural entities within the City.

**Section 3. Definition of Terms:**

- a. **Aerial spraying** refers to application of substances through the use of aircraft of any form which dispenses the substances in the air.
- b. **Agricultural practices** refer to the practices conducted by agricultural entities in relation to their agricultural activities.
- c. **Agricultural activities** refer to activities that include small, medium and large scale farming.
- d. **Agricultural entities**, refer to persons, natural or juridical, involved in agricultural activities.
- e. **Buffer zone** – is identified 30-meter zone within and around the boundaries of agricultural farms/plantations that need special monitoring to avoid or minimize harm to the environment and inhabitants pursuant to policies and guidelines set forth in this ordinance and other government regulations. It is an area of land that must lie within the property on which pesticides are applied that does not include public lands, public thoroughfares or adjacent private properties. It must be planted with diversified trees that grow taller than what are usually planted and grown in the plantation to protect those within the adjacent fields, neighboring farms, residential areas, schools and workplaces.
- f. **Pesticide** is any substance or product, or mixture thereof, including active ingredients, adjuvants and pesticide formulations, intended to control, prevent, destroy, repel or mitigate directly or indirectly, any pest. The term shall be understood to include insecticide, fungicide, bactericide, nematocide, herbicide,

molluscicide, avicide, rodenticide, plant regulator, defoliant, dessicant and the like.

- g. **Organic Farming** - is a form of agriculture which avoids or largely excludes the use of synthetic fertilizers and pesticides, plant growth regulators, and livestock feed additives. The role of organic agriculture in farming is to sustain and enhance the health of ecosystems and organisms from the smallest in the soil to human beings. Organic farming standards do not allow the use of synthetic pesticides, but it does allow the use of certain so-called natural pesticides, such as those derived from plants.

**Section 4. Scope and Applicability** - The provisions of this ordinance shall apply to all agricultural entities within the territorial jurisdiction of Davao City.

**Section 5. Ban on Aerial Spraying** – A ban on aerial spraying shall be strictly enforced in the territorial jurisdiction of Davao City three (3) months after the effectivity of this Ordinance.

**Section 6. Buffer Zone** – Consistent with national legislation and government regulations, all agricultural entities must provide for a thirty (30) meter buffer zone within the boundaries of their agricultural farms/plantations. This buffer zone must be properly identified through Global Positioning System (GPS) survey. A survey plan showing the metes and bounds of each agricultural farm/plantation must be submitted to the City Mayor’s Office, with the buffer zone clearly identified therein.

**Section 7. Penal Provisions** – Violation of any provision of this Ordinance shall be punished as follows:

- a. First Offense: Fine P 5,000.00 and imprisonment of not less than one (1) month but not more than three (3) months;
- b. Second Offense: Fine of P 5,000.00 and imprisonment of not less than three (3) months but not more than six (6) months and suspension of city-issued permits and licenses for one year;
- c. Third Offense: Fine of P 5,000.00 and imprisonment of not less than six (6) months but not more than one (1) year and perpetual cancellation of city-issued permits and licenses;

Provided that, in case the violation has been committed by a juridical person, the persons in charge of the management thereof shall be held liable.

**Section 8. Repealing Clause** - Any Ordinance that is contrary to or inconsistent with any of the provisions of this Ordinance shall be deemed amended or repealed accordingly.

**Section 9. Effectivity Clause**- This Ordinance shall take effect 30 days from its publication in three (3) major dailies in Davao City.