Submission on Objection No. 2.

Noeleen Keavey

From: [redacted]
Sent: 13 February 2017 15:41
To: Noeleen Keavey
Cc: Licensing Staff
Subject: Submission on Objections - ENVA W0184-2
Attachments: Submission on Objections - ENVA W0184-2.pdf

Noeleen,

Please find attached a submission on the objections regarding ENVA W0184-2.

Regards,

[redacted]

SUBMISSION ON 3rd PARTY OBJECTIONS TO ENVA W0184-2

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1 OBJECTION BY MS CONROY

Ms Conroy, a resident living within 350 meters, describes in detail the effects of living beside ENVA. She describes a pungent and overpowering odour which gives her a feeling of nausea, headache and feeling unwell. She references how these offensive odour nuisances have been going on for years. She lives in fear of opening her windows, and checking the wind direction for fear the emissions from ENVA will be heading towards her home. She recounts how she had to vacate her home over the years when the odour nuisance became unbearable.

What is described by Ms Conroy is not an isolated instance. Many of the formal complaints to the EPA over 18 years describe similar effects, and harm on human health from the emissions from ENVA. There are now close to 100 formal complaints with the EPA from workers and residents, and more than 20 since the criminal conviction of ENVA.

The detailed account given in Ms Conroy's objection is consistent with other residents, workers and children. They describe in their own words what it is like having to endure the emissions from ENVA in their homes and work places. A short sample of these interviews can be heard at the following link *http://goo.gl/n12erF*

In case there is any doubt that the situation has been resolved or improved, a number of residents and workers were interviewed in December 2016 at their homes and work places. They describe the on-going nuisance and distress caused by the emissions from ENVA. A short sample can be listened to at the following link *https://goo.gl/zDTjbB*

What is deeply concerning is correlating complaints like Ms Conroy's in her objection and others in the audio file with monitoring data. The 1st December, 2016 was a very calm and still day. The highest ground level concentrations will happen in such conditions when the emissions will accumulate in the air. Residents and workers describe very strong odours typical of ENVA on that day. At the monitoring station levels of Benzene

were recorded at 12 $\mu g/m^3$, 30 times above the general background level, and levels of mixed Xylenes at over 400 $\mu g/m^3$, approximately 400 times the background levels. It is worth bearing in mind from the 1999 and 2012 monitoring data of the tanks, that Xylene is only a small fraction of the total VOC emissions from the facility.

Seven days after the complaint referenced in Ms Conroy's objection, more complaints were received by the EPA from residents. On the 8th December, 2016 a further non-compliance was issued by the EPA to ENVA which stated "odour was detected downwind of the installation which was determined to be resulting in significant impairment of, or significant interference with the environment beyond the facility boundary."

A further complaint was again received by the EPA in January 2017 describing odours experienced by a resident while working in their back garden. Other residents who appeared in the Primetime Investigates program "Whats in the air in Portlaoise?" have also reported odour nuisances in January 2017 from ENVA. This is one year after the criminal conviction of the company and the broadcast of the Primetime Investigates program

DCC plc are the current owners of ENVA. These matters have been repeatedly brought to their attention, at the highest levels. It is difficult to understand why their organisation are continuing to subject residents, such as Ms Conroy and others, to distressing, highly offensive odours and affecting the quality of their lives to the extent that they have to leave their homes.

2 OBJECTION BY ENVA

There are fundamental points that are raised in my own objection to the granting of the licence, that from a hierarchical point of view, makes any comment on the proposed amended conditions by ENVA bordering on pointless. However, out of completeness, comments are made regarding a number of their objections.

- Condition 1.8.2 refers to the acceptance of waste within certain hours at the installation. In the comments they refer to the offloading of waste at late hours. They also refer to the potential heating of oil in the tankers to assist offloading due to increasing viscosity. There are 2 issues to address here. How is waste accepted with proper testing at these hours? Given the variability of waste, if the waste was contaminated how would this be known? Is the waste unloaded into separate segregation tanks for subsequent testing, or all into one tank? How is waste from emergency spills/incidents tested at these hours? If multiple deliveries are made out of hours and at weekends, are they all unloaded into the same tank, and in effect diluting down any potential high levels of prohibited substances?

  Secondly, there is no mention in the submission regarding the heating of tankers to assist in the unloading of waste oil. There will be obvious emissions from heating designated hazardous waste in tankers, and considerations regarding BAT 41, along with potential odour nuisances.

- Condition 3.7.2 regards the bunding of tanks and drums in storage areas. In the comments ENVA refer to inserting a proposed wording in the condition of "unless otherwise agreed with the Agency". This

statement is regularly proposed and inserted in other comments and conditions by ENVA in their objection. In effect this is pushing the decision making into the future, and outside the licence review process which enables submissions by members of the public etc. The original wording proposed by the EPA is robust. But yet again, what ENVA put in writing and do in practice appear to be different things. I refer to the non-compliance issued to the company on the 24th November, 2016 "Approximately no. 30-40 ASP containers/drums/commercial wheelie bins containing waste paint were observed stored un-bunded on the facility yard in areas that are not designated storage areas".

- Condition 3.19.3 refers to wheel cleaners used by vehicles. The proper wording by the EPA is suggested to be amended in the comments by ENVA with the word "contaminated" storm water. It is not clear what process ENVA would use to check for contamination, the type of contamination, frequency of cleaning etc. This additional wording may circumvent proper measures being employed. Again it is far more robust of the EPA to include the original statement.

- Condition 3.19.4 discusses the inspection regime for the wheel wash. Again the licensee requests that the proper inspection regime be ignored with a suggested vague statement "inspected and drained as required to ensure proper functioning". How will they ensure "proper functioning" if it is not inspected as requested?

- Condition 3.22.3 refers to the condition that vessels shall be enclosed to ensure no fugitive emissions. ENVA proposes the wording "to ensure no significant fugitive emissions occur". The problem with this is the interpretation of "significant". This word was previously trotted out on regular occasions when they were boiling the hazardous waste in open vented vessels, pumping air through it, and then describing that there were no significant fugitive emissions. The original wording employed by the EPA is robust.

- Condition 3.22.5 considers the waste soil treatment facility, and the request by ENVA to allow 8 months to fully enclose the building. This is a very serious matter, unlike some of the more lesser important items dealt with above. As outlined in the inspector's report, ENVA have mislead the EPA stating the building was enclosed, when in fact it was not. This is not a simple error. Are residents and workers from nearby Irish Rail to be subjected to another 8 months of contaminated dust from blowing into their homes and work places? Irish Rail have repeatedly brought the issue to ENVA over a number of years. It is hard to understand how ENVA could make a mistake of thinking a very large building was enclosed on all sides, when in fact it was only enclosed on 2 sides. This whole activity should be suspended immediately for the protection of human health. Under the 1992 EPA Act, clear guidance is given on false or misleading statements.

- Condition 6.10 refers to tank testing within 12 months, and 3 years thereafter. ENVA request that they just demonstrate the integrity within 12 months, but not test them, and test five years thereafter. In their rationale ENVA state that it excludes the provision of tests that may have already been carried out within 12 months and this would require them to retest the tanks. But it is not exactly clear from the

wording whether any tanks have been tested within the last 12 months. No list of the tanks that were tested are given. Given the vacuum of detail or data, it would be proper to ensure all tanks are tested within 12 months. ENVA then further claim the frequency of tank testing to the oil industry norm is excessive. Leading aside the vague statement unreferenced as to the oil industry norm, ENVA deal with hazardous waste in tanks, boiling them to high temperatures and it is hard to see how this could be compared to the oil industry norm. One has only to look at the fatalities caused by the oil recycling disasters such as Hub Oil, which was a result from a ruptured tank, to see the importance of proper and regular integrity testing, especially with oil at high temperatures. It is also unclear from any data supplied how old these tanks are. Given the plant was established in 1978, there is a possibility that some of the tanks may have been in operation for a substantial period of time. This was also a factor in the Hub Oil recycling disaster.

- Condition 6.18.6 deals with ENVA proposing to amend the activity of permitting compressed air to be pumped into the hazardous waste oil at less than 30 Celsius. This activity should not be allowed at all given the amount of data supplied by ENVA, i.e. none. What will the emissions be? In all the data requested by the EPA, no one ever thought to simply even measure the amount of air being pumped in from the compressor. This would at least be a starting point on which to build on when assessing the emissions. What amount or limit of compressed air is allowed to be pumped into the tanks, or will ENVA be allowed to vary it as they see fit? This again will affect emissions significantly.

  ENVA claim reluctance to carry out testing out of concern in creating a further odour nuisance. Yet they have been creating on-going nuisances, with over 20 complaints since the criminal conviction, and a further non-compliance issued.

  The response from ENVA proposes to circumvent the review process by kicking the decision making process off into the future, which will not enable members of the public to make submissions. The whole licence review was initiated by the decision of ENVA to install this RTO, and yet it appears they wish to agree all this with the agency at an undetermined future date. This is not acceptable.

  It has been further outlined previously by both ENVA in their application, and in objections, of the unsuitable nature of using carbon filters for dealing with low flow, high concentration emissions, that will saturate the carbon filters in a matter of hours from the vapour balancing ring. This situation will be signifcantly worse with high moisture content, where carbon filters are totally unsuitable.

- Condition 6.19.3 refers to ENVA proposing to insert the word "process gases for abatement shall only be introduced to the RTO...". The "process gases for abatement" phrase opens a whole can of worms of what are actually process gases. Are they just from thermal treatment, or do they include chemical dewatering, or if the compressed air is turned off are they still considered process gases, or if the heat is turned off but there are ambient emissions from the hot waste oil are they considered process gases? Or even more ambiguous, are process gases that are "not for abatement" excluded? This phrase is wide open to

interpretation. A more unambiguous wording is defining by exclusion in a negative sense, such as "Gases, excluding natural gas...".

- Condition 6.19.7 deals with the use of chlorinated solvents. There is a bizarre argument used by ENVA where they state that virgin fuel oils and the recovered fuel oil have low levels of chlorine levels present. The issue is not with the final product which may be an averaged aggregate from a large amount of processing, but with what is incoming. Waste oil has notorious variablity in its constituents. A simple example is local scrap yards and garages dumping degreasers into waste oil collection. It is unclear also from tank cleaning operations that ENVA employ, as to what exactly they are cleaning and what is in the waste. This variability of chlorinated solvents is reinforced by the only data available which is the Envirolex report showing chlorinated solvents at 372 mg/m^3, approximately 10 percent of the concentration of the waste stream. Yet the RTO has been designed to accept only up to 1 percent. It is very questionable at this level of chlorinated solvents whether an RTO is a proper abatement solution, with the risk of significant dioxin creation. The ENVA proposed archaic methodology of boiling hazardous waste and incinerating the emissions, goes against newer methods of closed cycle systems developed in the waste oil sector. ENVA also claim to make a comparison with other RTOs that are operating in Ireland. Again it is important to compare like with like, and it is not clear whether there are any RTOs employed in the waste oil sector in Ireland. Another point that is not clear either, is how the waste would be tested for chlorinated solvents to comply with this condition, given the unloading of oil, sometimes at late hours, over weekends.

- Condition 8.10 refers to dealing with waste processing being treated inside a building or closed vessel. Again the proposed wording by ENVA contains the phrase "unless otherwise agreed by the agency". This approach in attempting to have a variable licence is unacceptable. The licence review and decision making process is now, not at a later date.

- Condition 8.13 discusses the mixing of hazardous waste. ENVA propose removing a key phrase regarding "the purpose of the mixing operation shall be the production of waste derived fuel". Removing this condition opens the door to a whole field of potential chemical mixing on site. Arguments made by ENVA regards storing waste in the same area and shipping considerations. These arguments are very separate to the mixing condition that they request to be removed. Also they propose to add the word "significant" regarding environmental emissions. How is it known whether these emissions from mixing hazardous waste are significant or not significant? What testing has been done, and does it conform with the relevant BAT? It is far more robust to include the original wording to ensure no environmental emissions.

- Condition 8.14.5 refers to the net calorific value of the waste derived fuel. There was an attempt by ENVA to charaterise 19LS as equivalent to heavy fuel oil. As is published elsewhere, the net calorific value of processed fuel oil is approximately 14 percent less than heavy fuel oil. It is unclear whether customers buying processed fuel oil are aware of a significantly less calorific value over heavy fuel oil, and there is an

obvious concerns from other competitors and suppliers of heavy fuel oil to having a product of processed fuel oil being sold as equivalent, when it is not. Careful consideration must be given by the EPA as whether to authorize this activity. It is worth bearing in mind too, that in environmental emission studies it is prudent to use the worst case scenario to ensure compliance. Averaging will dilute the maximum. Given the maximum emissions from 11LS are far more significant, and the issues outlined in the other objections regarding 19LS, there are very serious environmental concerns regarding both products being sold by ENVA.

- Condition 8.17 As stated elsewhere in conditions, the proposed phrase by ENVA to include "unless otherwise approved by the agency" should be removed.

- Schedule A.1 refers to limitations of waste processes, and ENVA require the addition of washing waste containers. It is unclear from the submission as to how the disposal of the waste water from washing waste containers, IBCs etc is monitored and disposed. Does this include washing of containers that would have contained hazardous waste? Is it proposed to carry out the washing in a bunded area?

- Table A.2.2 As reiterated elsewhere in conditions, the proposed phrase by ENVA to include "unless otherwise approved by the agency" should be removed. Given the dust issues already outlined from this facility, further potential dust nuisances from accepting construction and demolition waste, including hazardous waste are unacceptable. The original wording proposed by the EPA should be unchanged. Regarding potential infectious healthcare risk waste, the proposed wording is not too broad as claimed by ENVA. ENVA propose to accept sharps from healthcare waste. Regarding the Irish Health and Saftey Authority, sharps injuries "may result in the transmission of blood borne viruses such as hepatitis B, C and HIV." These potentially infectious healthcare waste should not be accepted. European legislation and Irish law S.I 135 of 2014 refer to the issues and risks posed by sharps. Sharps are defined in the statute as "objects or instruments necessary for the exercise of specific activities, which are able to cut, prick or cause injury or infection."

- Scedule B.1 Emissions to Air, ENVA refer to emission limit values imposed by the EPA that are excessively restrictive, and propose new higher levels. Firstly they claim the limits are disproportionate and not consistent with EPA licencing norms. Unfortunately, this is not a "norm" situation. Given the criminal conviction of the company, close to 100 complaints which include harm on human health, headaches, soar throats, burning eyes etc. and the fact that this company is processing highly dangerous material in very close proximity to residential areas, it is correct of the EPA to impose strict conditions based on the disgraceful behaviour of this company.

  Secondly, ENVA claim a concentration limit should only apply when the mass emission limit is breached. They note in TA Luft, the mass emission limit effectively acts as thresholds above which the concentration limits should apply. This is not correct. The 1986 TA Luft contained a similar provision, but this is not contained in the 2002 TA Luft which states the mass emission or the concentration may not be

exceeded. They further request that the emission concentration limits of 50 mg/m^3 be applied rather than the lower 20 mg/m^3 as per BAT 41 due to low loads/flow. It is hard to even comprehend how A3-56, RTO bypass contingency filter could be considered low load. Industrial emissions directive specifically refers to BAT, not TA Luft mass emission limits, and BAT 41 sets VOC emission levels at 20 mg/m^3. It is anything but clear given the variability of waste oil, efficiency of the filters, variable concentrations of VOC, whether the load is in fact high or low for other filters. Based on that rationale the lower limit for the remainder filters is appropriate.

Thirdly, ENVA claim the approach of the inspector regarding employing the ambient air quality limit for benzene for setting total VOC emission limit values is conservative. The correct approach has been taken by the inspector.

Fourthly, ENVA request the mass emission limit based on TA Luft for total VOCs. Again the industrial emissions directive specifically refers to BAT, which is defined in concentration limits, and not TA Luft. ENVA argue that because the air dispersion modeling is not breaching ground levels at residential areas, they should be allowed to pollute to the maximum allowed by the 2002 TA LUFT mass emission limit. ENVA refer to the 2012 measurements and found no evidence of significant levels of benzene. Actually, not only were the levels not significant, but the EPA found none at all, not even a trace. This was highly suspect, but it is not surprising given they did not measure the temperature of the tank, where in the process the measurements were taken, or even what was in the tank. An EPA inspector referred to the odd puff of steam coming from the tanks when measurements were taken. This is at odds with footage showing large plumes coming from the tanks. It is highly probably that when the tanks were measured that they had already been heated for some time, with most of the water content and all of the benzene already boiled off. I refer to the Envirolex report again which showed the concentration of benzene **after abatement** at levels of 269 mg/m^3.

It is curious the interpretation by ENVA of TA Luft, in an attempt to get away from concentration limits, and replace them with mass emissions limits. Even more curious is attempting to have a mass emission aggregate limit for benzene for all the combined sources together, with all sources at the maximum permitted TA Luft emission limits. TA Luft states the mass emission or the mass concentration may not be exceeded, i.e. neither may be exceeded. It is not an *a la carte* choice of mass emission or mass concentration. Logically and explicitly spelt out it is:

IF (mass emission > 0.5 kg/hr) OR (concentration > 50 mg/m^3) THEN

TA Luft is breached

END IF

The appropriate aggregate analysis by the inspector in their report is correct, BAT 41 at 20mg/m^3, at the appropriate flow rates.

Leaving aside the fact that the atmospheric modeling provided in figure 1 and 2 is unreadable in the documentation provided by the EPA,

what is of concern again is that this is stated in the figure caption as an annual average atmospheric dispersion model, not a maximum one hour level model. Due to the batch processing nature of the facility, it is the one hour levels that are of concern and the maximum one hour levels. It is not mentioned as to what percentile the modeling was carried out. ENVA then compare the annual average levels from the atmospheric dispersion modeling, with UK environmental agency guidelines. It must by noted from the EPA guidance that AG4 states Danish-C and TA Luft immission limits.

- Schedule C.1.2 Monitoring of Emissions to Air, ENVA state they understand the need for some periodic monitoring to be undertaken on these sources. It is essential that the limits of BAT 41 at 20 mg/m^3 are applied, given the levels of concentrations of highly regulated substances listed in the Envirolex report, the variability of waste oil, different waste streams, the unsuitability of carbon filters for high concentration, low flow, and very questionable measurements of emission points to date.

  It is essential that total organic carbon should be monitored continuously by FID for A3-56, and not bi-annually as proposed by ENVA. A3-56 is the bypass of the RTO and is critical. Other filters, require far more frequent testing than what has been proposed by ENVA. Given the difficulties to date, is arguable that all filters should be continuously monitored to ensure compliance. This will ensure protection of human health and the environment, and ensure for residents and workers that they will not have to endure further headaches, sore throats, burning eyes, feeling ill and having to leave their homes from the hydrocarbon "odour" and emissions from ENVA. It is only with proper monitoring overseen by the EPA that compliance of this facility can be demonstrated.